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ECONOMIC SCENE

Poor U.S. Scores in Health Care Don't Measure Nobels and Innovation

By TYLER COWEN

Advocates of national health insurance cite an apparently devastating fact: the United States spends more of its gross domestic product on medical care than any nation in the world, yet Americans do not live longer than Western Europeans or Japanese. More Americans lack insurance coverage as well. It is no wonder that so many people demand reform.

But the American health care system may be performing better than it seems at first glance. When it comes to medical innovation, the United States is the world leader. In the last 10 years, for instance, 12 [Nobel Prizes](#) in medicine have gone to American-born scientists working in the United States, 3 have gone to foreign-born scientists working in the United States, and just 7 have gone to researchers outside the country.

The six most important medical innovations of the last 25 years, according to a 2001 poll of physicians, were magnetic resonance imaging and computed tomography (CT scan); ACE inhibitors, used in the treatment of [hypertension](#) and congestive heart failure; balloon [angioplasty](#); statins to lower [cholesterol](#) levels; [mammography](#); and coronary artery bypass grafts. Balloon angioplasty came from Europe, four innovations on the list were developed in American hospitals or by American companies (although statins were based on earlier Japanese research), and mammography was first developed in Germany and then improved in the United States. Even when the initial research is done overseas, the American system leads in converting new ideas into workable commercial technologies.

In real terms, spending on American biomedical research has doubled since 1994. By 2003, spending was up to \$94.3 billion (there is no comparable number for Europe), with 57 percent of that coming from private industry. The [National Institutes of Health](#)'s current annual research budget is \$28 billion, All [European Union](#) governments, in contrast, spent \$3.7 billion in 2000, and since that time, Europe has not narrowed the research and development gap. America spends more on research and development over all and on drugs in particular, even though the United States has a smaller population than the core European Union countries.

From 1989 to 2002, four times as much money was invested in private biotechnology companies in America than in Europe.

Dr. Thomas Boehm of Jerini, a biomedical research company in Berlin, titled his article in *The Journal of Medical Marketing* in 2005 "How Can We Explain the American Dominance in Biomedical Research and Development?" (ostina.org/downloads/pdfs/bridgesvol7_BoehmArticle.pdf) Dr. Boehm argues that the research environment in the United States, compared with Europe, is wealthier, more competitive, more meritocratic and more tolerant of waste and chaos. He argues that these features lead to more medical discoveries. About 400,000 European researchers are living in the United States, usually for superior financial compensation and research facilities.

This innovation-rich environment stems from the money spent on American health care and also from the richer and more competitive American universities. The American government could use its size, or use the law, to bargain down health care prices, as many European governments have done. In the short run, this would save money but in the longer run it would cost lives.

Medical innovations improve health and life expectancy in all wealthy countries, not just in the United States. That is one reason American citizens do not live longer. Furthermore, the lucrative United States health care market enhances research and development abroad and not just at home.

The gains from medical innovations are high. For instance, increases in life expectancy resulting from better treatment of cardiovascular disease from 1970 to 1990 have been conservatively estimated as bringing benefits worth more than \$500 billion a year. And that is just for the United States.

The American system also produces benefits that are hard to find in the numbers. The economist Arnold Kling in his "Crisis of Abundance: Rethinking How We Pay for Health Care" (Cato Institute, 2006) (catostore.org/index.asp?fa=ProductDetails&method=cats&scid=37&pid=1441301) argues that the expected life span need increase by only about half a year for the extra American health care spending to be cost-effective over a 20-year period. Given that many Americans walk less and eat less healthy food than most Europeans, the longevity boost from health care in the United States may be real but swamped by the results of poor lifestyle choices. In the meantime, the extra money Americans spend to treat allergy symptoms, pain, depression and discomfort contributes to personal happiness.

Compared with Europe, the American system involves more tests, more procedures and more visits with specialists. Sick people receive more momentary comforts and also the sense that everything possible has been done. This feeling is of value to the family even when the patient does not improve. In contrast, European countries have not created comparably high expectations about the medical process. If we count "giving people what they would want, if they knew it was there" as one measure of medical value, the American system looks better.

American health care has many problems. Health insurance is linked too tightly to employment, and too many people cannot afford insurance. Insurance companies put too much energy into avoiding payments. Personal medical records are kept on paper rather than in accessible electronic fashion. Emergency rooms are not always well suited to serve as last-resort health care for the poor. Most fundamentally, the lack of good measures of health care quality makes it hard to identify and eliminate waste.

These problems should be addressed, but it would be hasty to conclude that the United States should move closer to European health care institutions. The American health care system, high expenditures and all, is driving innovation for the entire world.

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