



PERC Perspectives on Policy

February 2008

Wealthy and Healthy?

Andrew J. Rettenmaier and Thomas R. Saving

Comparing the health care system in the United States to those in other countries produces some conflicting observations. On one hand, the United States is one of the wealthiest countries in the world and, when compared to all other nations, its population is relatively healthy in terms of life expectancy and infant mortality rates. On the other hand, if we limit the comparison to the world's more developed countries, the US lags behind when judged by the same health measures. This is particularly concerning given the fact that US health care expenditures per person far exceed per-capita health expenditures in any other country.

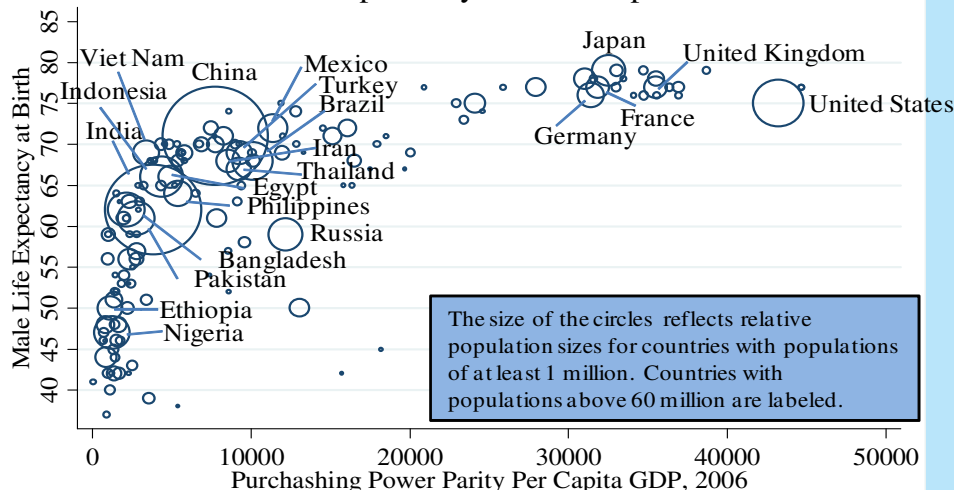
While on the surface these facts appear perplexing, a closer look at a few of the health indicators used to compare the US to other countries can help put the observations into context.

Health care remains front and center in the public policy arena for a number of reasons. First, government projections indicate that within 20 years, one-quarter of our nation's Gross Domestic Product (GDP) will be dedicated to health care spending. Second, 45 percent of health care is paid for directly through federal, state and local governments, and another 10 percent is implicitly paid through tax subsidies. The would-be health care reformer has the difficult task of suggesting ways to reduce the growth of health care spending, at least from public coffers, while at the same time suggesting ways to make the system more efficient in producing the desired outcome of a healthy, long-lived populace. Adding to the complications is the fact that in the nation that spends the most on health care, 14 percent of the population is uninsured.

Some reformers would have the US adopt a single payer system like those in many of the other developed countries with the hope of squeezing out waste and redundant investments. Others see the current market outcomes as by-products of the incentives facing health care suppliers and consumers and look for ways to affect these incentives as the path to fundamental reform. Regardless of one's vantage point, it is crucial to provide some context for the discussion.

Figure 1 depicts the relation between per capita Gross Domestic Product (GDP) and male life expectancy for all countries with

Figure 1: An International Comparison of Life Expectancy and Per Capita GDP



Sources: International Monetary Fund and World Health Organization



TEXAS A&M
UNIVERSITY

Thomas R. Saving
Director

Professional Board

Chairman:
Frank M. Muller, Jr. '65
TenX Technology

Anthony J. Best '72
St. Mary Land & Exploration Co.

Bill E. Carter '69
Carter Financial Management

David C. Elmendorf '71
The William Charles Group

H. Jarrell Gibbs '60
TXU Corporation

Celia Goode-Haddock '72
University Title Company

Randolph W. House '67
LTG. U.S. Army (Retired)

Nora A. Janjan
M.D. Anderson Cancer Center

A Dwain Mayfield '59
Lockheed Martin

George Peterkin, Jr.
Kirby Corporation

Directors Emeriti

Douglas R. DeCluitt '57
Henry Gilchrist '46
H. Pearson Knolle, Jr.
Carroll W. Phillips '54
Robert G. Wallace '50

Academic Board

G. Kemble Bennett, Dean
*Dwight Look
College of Engineering*

Ricky W. Griffin, Interim Dean
Mays Business School

Mark A. Hussey, Interim Dean
*College of Agriculture
and Life Sciences*

Charles A. Johnson, Dean
College of Liberal Arts

Douglas J. Palmer, Dean
*College of Education and
Human Development*

populations in excess of 1 million. This kind of graph is often used to establish the positive relation between life expectancy and income. Countries' populations are represented in the figure by circles, where circle size is proportional to population. In China, for example, male life expectancy at birth is 71 years and per-capita GDP, adjusted for purchasing power parity with the US, is \$7,700. China's world-leading population of 1.3 billion accounts for it having the largest circle. At the lower end of the income and life expectancy scale is Nigeria, where per capita GDP is \$1,200 and male life expectancy at birth is 47 years. At the higher end of the scale is the United States with per capita GDP of \$43,200 and male life expectancy of 75 years.

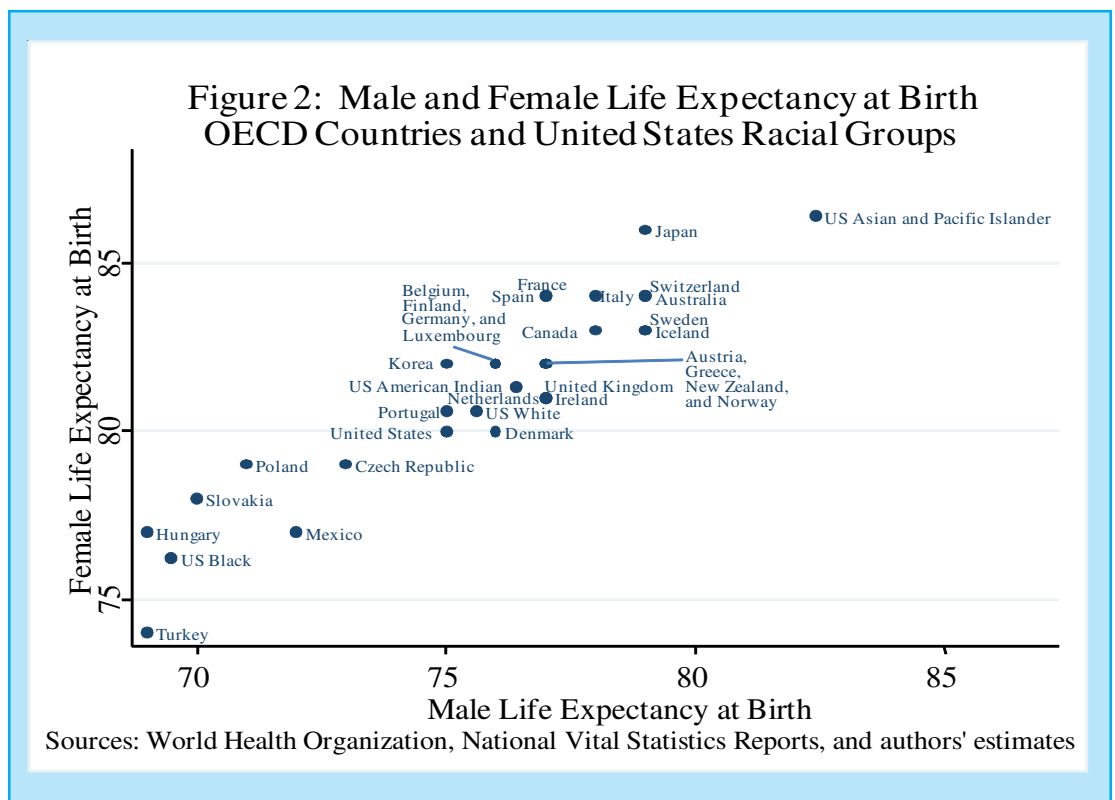
The figure shows that longevity gains are quite rapid moving from the lowest per capita GDP levels up to about \$20,000, after which the gains are relatively flat. Much of the gradient's steepness over the lower range of incomes is due to the effective treatment and prevention of communicable diseases.

Among the larger and higher income countries, Japan has the highest life expectancy while the US has slightly lower life expectancy than France, Germany and the

United Kingdom—all countries with per-capita health care expenditures below the US.

To better understand these aggregate health outcomes, Figure 2 shows life expectancies for many of the higher income countries and US racial groups. Specifically, the figure shows male and female life expectancies for the Organization for Economic Cooperation and Development (OECD) countries, and for four racial groups in the United States: whites, blacks, American Indians, and Asian and Pacific Islanders. The male and female life expectancies at birth across all racial groups in the United States are 75 and 80, respectively. This places the United States ahead of other OECD countries Turkey, Hungary, Slovakia, Mexico, Poland, and the Czech Republic, but behind the remaining countries.

However, when considering the US racial groups, we see that the life expectancies of US Asian and Pacific Islanders place them above the life expectancies of all OECD countries. The 13 million people in this subset of the American population is not small - it exceeds the population of 15 of the 30 OECD countries. We also see in this comparison that American Indians have higher longevity than the US white population and





that the US white population has longevity similar to Portugal and Denmark. Male and female blacks in the US have higher life expectancies than their counterparts in Turkey. Black males also have a higher life expectancy than Hungarian males. Overall, this comparison shows that a single metric does not convey the entire story for any country, particularly for a country as diverse as the United States.

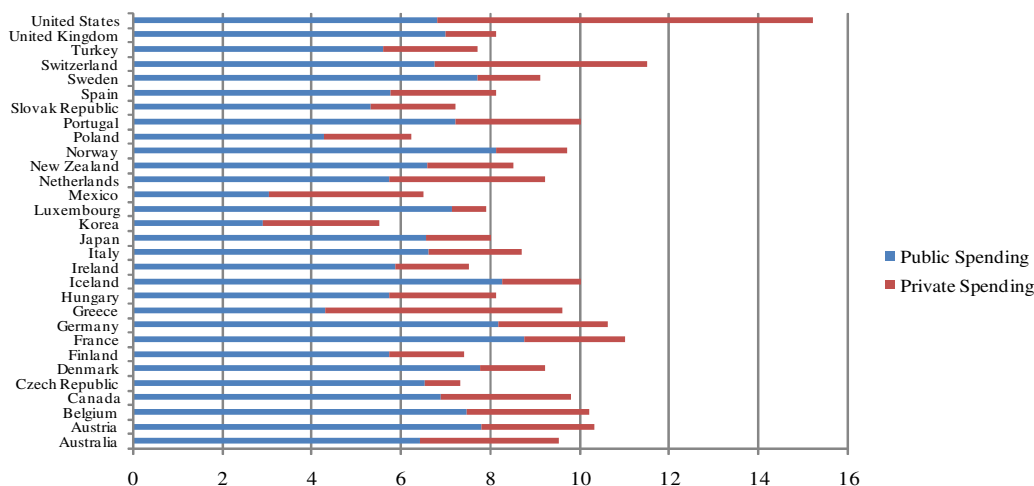
A final comparison between the United States and the other OECD countries is presented in Figure 3. In 2004, 15.2 percent of GDP was dedicated to health care in the US. This is 3.7 percentage points higher than in Switzerland, the country with the next highest percentage. In contrast, direct public health care spending as a percentage of GDP in twelve of the other 29 countries was in excess of the percentage in the United States. So, while the US dedicates the highest share of its output to health care spending, its public spending on health care as a share of GDP is closer to the middle of the pack among OECD countries.

These simple comparisons illustrate that life expectancy rises with countries' incomes, but that the relation is relatively flat among higher income countries. Further, the life

expectancies exhibited by racial groups in the US span those of the OECD countries, and Americans of Asian and Pacific Islander descent live longer than even the Japanese, suggesting that life expectancy is related to both income and ethnicity. Finally, the US does indeed spend more on health care than any other country both in terms of dollars spent and as a percentage of GDP, but public spending on health care as a percentage of GDP is about average when compared to other developed countries.

It should be expected that wealthier nations spend more of their incomes on health care because health is a superior good. Determining whether the current percentage spent in the United States is optimal is complicated by the role of public players as well as the significant tax subsidy. The optimal level of aggregate spending begins with consumers making informed insurance purchases in a market that does not unduly favor health care consumption over non-health care consumption. Support for the disadvantaged should also be guided by the same principles such that health care costs are not neglected, but are taken into full consideration in their decisions to seek medical care.

Figure 3: Health Care Spending as a Percentage of GDP
OECD Countries in 2004



Source: OECD Health Data 2007