

Buying Time

BY CHARLES GERENA

Pundits and politicians often complain about out-of-control health care costs. Why are we spending more and more money on the latest high-tech devices, medical procedures, and wonder drugs, they ask, when we could be using that money to make the economy more productive and competitive?

The reason, according to two economists, is that we *are* getting something for all of the money we're spending on health care. As Americans have become wealthier overall, we have chosen to devote more of our resources to leading longer, healthier lives. In essence, we're buying ourselves more time.

In their recently published paper, Robert Hall of Stanford University and Charles Jones of the University of California at Berkeley build upon a large body of work on the value of life and the willingness to pay to avoid death. They note that several studies have shown that increases in longevity have been roughly as important to welfare as increases in consumption for things unrelated to health care. One study used a model in which health investments reduced the "depreciation rate" of the knowledge capital acquired through schooling.

Hall and Jones developed their own model to describe how the nation divides its resources between health and nonhealth spending to maximize social welfare. Using mortality rate and health expenditure data, the model projects that health care services will account for roughly one-third of the United States' gross domestic product by the middle of the 21st century. That would be double the share of GDP devoted to health care in 2000 (15.4 percent) and six times the share in 1950 (5.2 percent).

Their model is based on the economic tenet of standard preferences: Consumers make rational choices in order to maximize their expected utility, or level of satisfaction. The more you consume of something, typically, the less additional utility you obtain from the additional consumption. Drinking a glass of lemonade to cool off on a hot summer day gives you more pleasure than drinking the fifth glass that makes you rush to the bathroom.

In the case of health care services, the diminishing returns are offset by the increased value of living longer. Therefore, as overall incomes rise and people are willing and able to purchase more of certain goods and services, they shift their spending from other areas of consumption to health care.

In general, consumers earning more income seek out the next most desirable alternative that they can afford. They demand fewer inferior goods (like beer and apartments) and demand more normal goods (like wine and single-family housing). For some normal goods, demand rises at a faster rate than the change in incomes. These are called "superior goods." Hall and Jones place health care in this final category.

While Hall and Jones say that people are willing to spend more on health care to improve their lives, the case is not quite closed. There is still a debate over whether these additional expenditures have actually made us healthier. Some studies have found that marginal increases in health care expenditures yield only low marginal increases in outcomes, though certain preventative measures like flu vaccines and breast cancer screening have had a major

impact on public health. Advances in medical technology, changes in behavior, greater awareness through health education, and declines in pollution may deserve some of the credit for our longer life spans.

Technological advances have also been blamed for pushing up the cost of health care. Hall and Jones acknowledge that the invention of new and more expensive diagnostic equipment, surgical

tools, and medications has contributed to higher health spending. But it isn't the whole story. "Expensive health technologies do not need to be used just because they are invented," the economists wrote in their paper published in the *Quarterly Journal of Economics*.

This brings up another problem for higher health care costs — the third-party payer system, which puts government and employer-funded health insurance between those who buy medical services and those who sell them. Most economists would agree that the system interferes with the usual interaction between the price of goods and the amount of goods demanded.

Hall and Jones focused on investigating what the optimal level of health care spending should be, regardless of what kind of payer-system is in place. Their conclusion is that deeper economic forces are at work to drive up health care spending globally: "Although distortions in health insurance in the United States might result in overuse of expensive new technologies, health shares of GDP have risen in virtually every advanced country in the world, despite wide variation in systems for allocating health care." **RF**

"The Value of Life and the Rise in Health Spending" by Robert E. Hall and Charles I. Jones. *Quarterly Journal of Economics*, February 2007, vol. 122, no. 1, pp. 39-72.