Must Fixing U.S. Health Care Come at a Cost to Innovation?

By AARON E. CARROLL and AUSTIN FRAKT

The United States health care system has many problems, but it also promotes more innovation than its counterparts in other nations. That's why discussions of remaking American health care often raise concerns about threats to innovation.

But this fear is frequently misapplied and misunderstood.

First, let's acknowledge that the United States is home to an outsize share of global innovation within the health care sector and more broadly. It has more clinical trials than any other country. It has the most Nobel laureates in physiology or medicine. It has won more patents. At least one publication ranks it No. 1 in overall scientific innovation.

Strong promotion of innovation in health care is one reason the United States got as far as it did in our recent bracket tournament on the best health system in the world (Switzerland won). Though the United States lost to France, 3-2, in the semifinals, it picked up its two votes in part because of its influence on innovation, which can save lives in the United States and throughout the world.

Now we shouldn't delude ourselves into thinking Americans are inherently more innovative than people in other countries. In fact, many American innovators are immigrants who may or may not be citizens. Many technological and procedural breakthroughs in medicine have occurred in other countries.

Rather, the nation's innovation advantage arises from a first-class research university system, along with robust intellectual property laws and significant public and private investment in research and development.

Perhaps most important, this country offers a large market in which patients, organizations and government spend a lot on health and companies are able to profit greatly from health care innovation.

MARK MAKELA FOR THE NEW YORK TIMES

Hospital staff trying to resuscitate a heart attack victim. Innovation in treating cardiovascular disease has helped lift life expectancy.

The United States health care market, through which over one-sixth of the economy flows, offers investors substantial opportunities. Rational investors will invest in an area if it is more profitable than the next best opportunity.

"The relationship between profits and innovation is clearest in the biopharmaceutical and medical device sectors," said Craig Garthwaite, a health economist with Northwestern University's Kellogg School of Management, and one of the judges in our tournament. "In these sectors, firms are able to patent innovations, and we have a good sense of how additional research funds lead to new products."

High brand-name drug prices, along with generous drug coverage for much of the population, fuel an expectation that large biopharmaceutical research and development investments will pay off. Were American drug prices to fall, or coverage of prescription drugs to retrench, the drug market would shrink and some of those investments would not be made. That's a potential innovation loss.

This is not mere theory, economists have shown. Daron Acemoglu and Joshua Linn found that as the potential market for a type of drug grows, so do the number of new drugs entering that market. Amy Finkelstein showed that policies that made the market for vaccines more favorable in the late 1980s encouraged 2.5 times more new vaccine clinical trials per year for each affected disease. And Meg Blume-Kohout and Neeraj Sood found that Medicare's introduction of a drug benefit in 2006 was associated with increases in preclinical testing and clinical trials for drug classes most likely affected by the policy.

Health care innovation can have direct benefits for health, well-being and longevity. A study led by a Harvard economist, David Cutler, showed that life expectancy grew by almost seven years in the second half of the 20th century at a cost of only about $20,000 per year of life gained. The vast majority of gains were because of innovations in the care for high-risk, premature infants and for cardiovascular disease. These technologies are expensive, but other innovation can be cost-reducing. For instance, in the mid-1970s, new dialysis equipment halved treatment time, saving labor costs.

> Seeking to reorient toward improving health outcomes.

Even with those undeniable improvements, there are questions about the nature of American innovation. Work by Mr. Garthwaite, along with David Dranove and Manuel Hermosilla, showed that although Medicare's drug benefit spurred drug innovation, there was little evidence that it led to "breakthrough" treatments.

And although high prices do serve as incentive for innovation, other work by Mr. Garthwaite and colleagues suggests that under certain circumstances drug makers can charge more than the value of the innovation.

The high cost of health care, an enormous burden on American consumers, isn't necessarily a unique feature of our mix of private health insurance and public programs. In principle, we could spend just as much, or more, under any other configuration of health care coverage, including a single-payer program. We spend a great deal right now through the Medicare program — often held out as a model for universal single-payer.

Despite the fact that traditional Medicare is an entirely public insurance program, there's an enormous market for innovative types of care for older Americans. That's because we are willing to spend a lot for it, not because of what kind of entity is doing the spending (government vs. private insurers).

In fact, some question whether the innovation incentive offered by the health care market is too strong. Spending less and skipping the marginal innovation is a rational choice. Spending differently to encourage different forms of innovation is another approach.

"We have a health care system with all sorts of perverse incentives, many of which do little good for patients," said Dr. Ashish Jha, director of the Harvard Global Health Institute and the other expert panelist who favored the U.S. over France, along with Mr. Garthwaite. "If we could orient the system toward measuring and incentivizing meaningfully better health outcomes, we would have more innovations that are worth paying for."

Naturally, the innovation rewarded by the American health care system doesn't stay in the U.S. It's enjoyed worldwide, even though other countries pay a lot less for it. So it's also reasonable to debate whether it's fair for the United States to be the world's subsidizer of health care innovation. This is a different debate than whether and how the country's health care system should be redesigned. We can stifle or stimulate innovation regardless of how we obtain insurance and deliver care.

"We have confused the issue of how we pay for care — market-based, Medicare for all, or something else — with how we spur innovation," Dr. Jha said. "In doing so, we have made it harder to engage in the far more important debate: how we develop new tests and treatments for our neediest patients in ways that improve lives and don't bankrupt our nation."

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Andrew Ross Sorkin, whose DealBook column normally appears on Tuesdays, is away.

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