THE PENNSYLVANIA
GAZETTE
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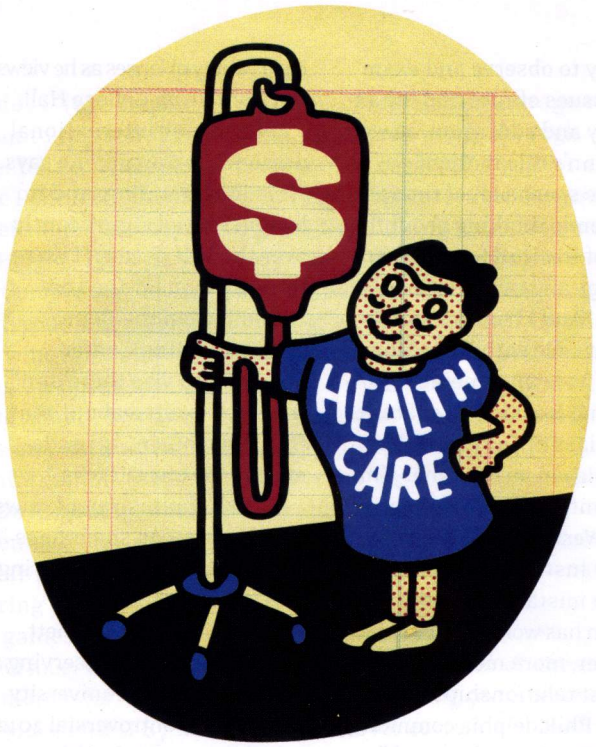
"Genetic Genealogist" Theodore Schurr

Consciousness-Raiser John Lilly M'42

Alumni Weekend & Commencement

Re-Imaging the Baroque

The State of the Health-Care Economy



When David Asch GM'87 WG'89 was executive director of the Leonard Davis Institute of Health Economics, he would occasionally receive phone calls from the institute's founding benefactor.

"Often he started out with a question: 'So David, what percentage of GDP is healthcare these days?'" Asch recalled during an Alumni Weekend panel discussion marking the LDI's 50th anniversary. "And I'd say, 'Well I don't know, Leonard, 15 percent.' At which point he would go ballistic, and say, 'What are you talking about! When I started the Leonard Davis Institute, it was 6 percent! What the heck are you guys doing over there?!'"

At which point Asch would "very carefully" reply: "But had you not started the Leonard Davis Institute, we'd be at 25 percent!"

Asch, who is currently the John Morgan Professor of Medicine and Medical Ethics and Health Policy and a professor of healthcare management, was one of three former LDI executive directors on a panel moderated by its current chief, Dan Polsky Gr'96. They explored how the business of medical care has changed in the last half-century, and some of the challenges and opportunities ahead. (Video is available at tinyurl.com/y8utkjwl.)

Though the hefty fraction of gross domestic product that goes to healthcare looms large in such discussions, Mark Pauly, the Bendheim Professor of Health Care Management at Wharton, dismissed it as "the world's most pernicious measure of a country's efficiency of its healthcare system."

"I don't lay awake nights worrying about 17 percent of GDP going to healthcare," the health economist said. "The Germans don't lay awake nights knowing that they have the developed world's highest fraction of GDP going to clothing. Why is healthcare more troublesome than clothing?

"The question is not the fraction of GDP," he added. "It's if there's waste."

Answering that requires taking stock of what patients are getting for their money.

"I graduated from medical school in 1974," said Sandy Schwartz, the Leon Hess Professor of Medicine, by way of an answer. He noted that computerized tomography and magnetic resonance imaging scans had not yet been developed. "Ultrasound was new when I was a resident, and all it was good for was determining the size of your kidneys, and if there was a mass ... We had 30 or 40 lab tests that were worth doing, and we had to do them ourselves most of the time. We had 30 or 40 medications that worked, and that was it.

"Today there's not a single patient that any physician here sees," he declared, "who he or she cannot take better care of, give a better quality of life, and extend their survival compared to what it was 30 or 40 years ago."

Linda Aiken, the director of the Center for Health Outcomes and Policy Research in the School of Nursing, posited that these gains derive partly from changes in the healthcare workforce. "In the early 20th century," she noted, "there was one doctor for every three [healthcare] workers. By the 1980s, there was one doctor for every 16 workers. And now we estimate that there's one doctor per about 30 workers." The rise of advance-practice nurses, physician assistants, and other auxiliary providers has amplified the productivity of physicians and often led to greater levels of patient satisfaction.

Schwartz foresees further changes in that realm—driven largely by the escalating challenge of information analysis in the age of genomics, microbiomics, and other data-intensive components of clinical research and decision-making.

"There are over 5,000 genetic tests that are available today, each at a cost of several thousand dollars, that can validly, reliably detect whether or not you have a genetic variant of some sort," he observed. "But we have no idea for 4,800 of them whether they will make *any* difference in the clinical care—whether they are related to your clinical outcome.

"We have all this data we're getting, but we are not prepared to analyze it. And it will take changes in the workforce—both at the technical level, and training physicians and nurses and medical professionals and PhDs who understand not only the science, but the informatics to be able to use this."

Pharmaceutical advances are another big part of the successes of recent decades—and a potentially destabilizing factor in managing medical costs down the road.

"When I finished my training, we had three drugs to take care of hypertension," Schwartz noted, listing three medications well-known for their side effects. "And basically, you knew somebody was taking their medication if they were so depressed they were suicidal; they were impotent; or when they stood up, they passed out." Compare that with today, especially now that the patents protecting statin drugs have expired. "Without using my insurance card, I can buy a year's worth of atorvastatin for $12 at Costco. And that

STEPHEN SCHUDLICH

has been shown to reduce cardiovascular deaths in people with heart disease by over 50 percent, over a 5- to 10-year period of time."

That's the system at its best.

"On the other hand," he added, "we have a system which is encouraging the development of drugs that add very little incremental value, at high cost. Everybody's pricing their cancer therapies at $100,000 to $200,000 a year, many of them for giving you two or three weeks of average increased survival—of which at least half that time is being sick from the chemotherapy. We really have a system that doesn't respond to prices very well."

Pauly sounded a pessimistic note about the most recent attempts to reform healthcare markets.

"There is very little private-sector cost-containment in the ACA—or in the Republican alternative," he said, noting, however, that the Affordable Care Act did include substantial cost-containment measures pertaining to Medicare. "The one thing that cheered the hearts of health economists was the Cadillac tax," a provision of the ACA that would have imposed a 40 percent excise tax on the cost of annual health-insurance premiums in excess of $10,800 for an individual. That, Pauly contended, was a way of "limiting a big tax break that's offered to high-income people like me," who are not taxed on the value of employer-sponsored insurance premiums. This "open-ended tax subsidy for upper/middle-income people," Pauly said, costs the government roughly $250 billion a year—and encourages imprudent use of medical resources. (He confessed to using the money left over in his tax-sheltered health-care savings account at year's end to buy designer eyeglass frames.)

The hearts of health-care economists, alas, were quickly chilled by the political winds, which have delayed the implementation of the Cadillac tax.

Pauly also declared that health economists "need to develop bullet-proof evidence that health insurance really does improve people's health." Insurance coverage correlates with better health outcomes, but correlation does not establish causation—and a randomized controlled trial of health-insurance access in Oregon failed to demonstrate that it led to superior outcomes among poor, able-bodied adults.

That experiment concluded that insurance led people to incur roughly 30 percent higher medical costs, and insulated them from unpayable medical bills (which are a leading cause of personal bankruptcy in the United States.) "But health outcomes were barely affected, and certainly mortality was not affected," Pauly said. He remains a believer in health insurance, albeit one who still pines for irrefutable evidence of its effectiveness.

"Because without that evidence," he noted, "subsidies to health insurance in general for low-income people is in serious jeopardy. A reasonable person might ask: If all health insurance does is protect your wealth, not your health, than should we be so much in favor of it?" ◆ *–TP*

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Hospital of the Future

The nation's oldest teaching hospital unveiled plans for a building that aims to keep pace with "the next hundred years of advances in patient care," as University of Pennsylvania Health System CEO Ralph Muller put it in a May announcement. The Pavilion, a 17-story facility on the former site of Penn Tower, will house inpatient care for the Abramson Cancer Center, heart and vascular medicine and surgery, neurology and neurosurgery, and a new emergency department. The design is by healthcare design firm HDR, architect Foster+Partners, and engineering firm BR+A. The $1.5 billion Pavilion, the largest capital project in Penn's history, is expected to be completed in 2021.