

# THE TECHNOLOGY TRAP

cople with cancer have good reason to feel relieved when the disease goes into remission, and good reason to feel heightened alarm when it returns. An analogy with the cost of health care comes to mind. The 1970s and 1980s saw an eruption of double-digit inflationary health care costs, an economic disease of the first order. Then, from 1996-1999, a miracle of remission occurred: The increase stopped; costs leveled off. Even better, in the HMO movement, which was credited with the surprising economic stability, a permanent cure seemed at hand.

No such luck. By 2000 the costs were going up again, from 12 percent to 18 percent, and that trend has continued into 2001. We should now feel the heightened alarm that occurs when the remission has passed. What happened? The most obvious message is that the HMOs, even at their nastiest, are not able to hold down costs. Don't look for a cure in that direction. But there was another obvious message as well, indicating the principal reason for the cost increase.

The villain turns out to be that much-beloved feature of American health care—its fine, unparalleled, and endlessly innovative use of technology. Some 40 percent of the cost increase can be traced to the combination of new technologies and an intensified use of the old ones; and some

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BY DANIEL CALLAHAN, PhD

20 percent within *that* figure is attributable to pharmaceuticals. The HMOs could not figure out how to deal with the technological factor. Neither, it seems, can anyone else.

## A TOUCHY SUBJECT

The article by James F. Drane, PhD, that leads this special section ("For an Ethics of Technology," p. 30) deals with one vital aspect of technology: how and when to draw the line against technologies, or the use of technologies, that would violate moral values. The other side of that coin, at least in biomedicine, is the problem of setting limits when the technologies are otherwise ethically acceptable but incur costs that can create injustice. Those are particularly unpleasant problems, requiring society to consider denying people the use of good and helpful technologies because it needs to use scarce resources in other ways, such as education or job creation.

Unless we hold that any good medical technology ought to be available to every patient without limits, with no concern for cost and for even marginal benefits—a wholly unrealistic possibility—then we need to consider limits. The Catholic tradition has been much better in taking on the limits of technology generally—willing enough to say no, whether we agree or not—than on setting limits to medical expenditures under conditions of scarcity. As I have found with some of my own writings on that subject, limiting technology can be a dangerous topic to raise, incurring the risk that the writer will be accused of favoring social euthanasia or promoting a culture of death.

My hope at this point is that the new economic crisis will force us, as a progress-driven, technology-infatuated culture, to begin entertaining a simple, but obviously threatening, idea: that the combination of biomedical research, technological innovation, and market influences must inex-



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coming this year from the University of California Press/Milbank Memorial Fund. orably drive up costs. Put another way, our love of technological progress and our desire to hold down costs without setting some limits cannot be reconciled.

A variety of strategies have been entertained over the years to avoid just that insight. Some people claim that research will eventually lower costs by curing expensive diseases or discovering inexpensive amelioration. The pharmaceutical industry has pushed that argument with great vigor. The evidence in favor of that notion is about as scant as that for the health benefits of its dozens of only marginally beneficial, but aggressively advertised, products. Others claim that price controls on drugs, or tough government and HMO buying practices, can work to control their costs. Price controls might make a difference but they are unlikely to be adopted in the United States; and government buying practices have not managed to keep the drug cost problem from erupting in Canada and Western Europe.

New technologies alone do not drive up costs; the intensified use of those already in use does so even more. A variety of strategies have been devised as possible cost-capping mechanisms.

Boost Out-of-Pocket Payments Forcing people to pay more for their health care through increased deductibles and copayments can make a difference. Everyone thinks twice when it's his or her own money. But the downside is that, to avoid spending money, many sick people avoid going to doctors until it is too late.

Use Evidence-Based Medicine This strategy has been stressed for well over a decade as an effective way to control the use of technology. But it can never be more than a partially effective tool. Evaluating the medical effectiveness of every technology is impossible, and impossibly costly, and constant innovation makes it difficult to keep up in any case. And even when a technology has been effectively evaluated, many moral and medical dilemmas remain: Should society, for example, pay for small marginal benefits? Should we spend large amounts of money to save a few lives instead of the many hundreds of patients who might be treated more inexpensively?

Learn from Other Cultures Other countries use medical technology very differently than it is used in the United States. (Great variation exists also in the way technology is used in different regions within this country.) But our heavy reliance on technology seems to have little impact on population health status, when compared with countries that rely on it much less. This certainly suggests that something is profoundly wrong with our dissemination and use of technology. But we have yet to understand clearly just what that is.

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# THREE UNREALISTIC ASSUMPTIONS

That failure should by now have convinced us that the technology problem is much deeper and more difficult to address than previously imagined. Greater efficiency is of course possible. A better use of market incentives and disincentives can also make a difference—as long as we don't worry about equitable access or the needs of the poor. That much said, however, the present cost crisis should force us to rethink some cherished assumptions and values.

Research Will Solve the Problem The first of these assumptions I have already mentioned: the belief that research will eventually lower costs. No serious evidence indicates that this will happen. What's worse, there are strong initial suggestions that the new genomics coming on line will do even more to raise costs than the traditional pharmaceuticals. Progress costs money, and progress in the development of therapies for the chronic diseases of an aging society will be even more costly.

Respect for Life Requires Constant Innovation The second assumption is that a respect for the sanctity of life requires biomedical progress and constant technological innovation. Progress and innovation save lives and reduce suffering, don't they? How can we morally deny them to people who need them?

The mistake here is to assume that only a total warfare of medicine against death and disability can have moral support. But that is a false, excessively secular, view of the goals and purposes of medicine. A decently long life and a minimizing of pain and disability are more reasonable goals that do not require the infinite spending of resources. Many of the worst health care problems in the United State do not, in any case, stem from a shortage of advanced technology. Instead, they reflect poverty, a lack of access to even low-cost technology, and a failure to provide inexpensive public health measures.

**Rationing Is Wrong** The third assumption, closely related to the second, is that any setting of limits on health care or technology—rationing, that iswould be wrong.

Liberals hate the idea of rationing because they know that its results would almost certainly be inequitable; the rich would buy their way out of any rationing scheme. Moral conservatives hate rationing because it could cost lives (as if the present system of de facto rationing does not already do so). Wesley J. Smith has made a name for himself with his book *Culture of Death*, which argues that, under the baneful influence of bioethicists, American medicine is letting people die right and left, either through an indifference

to the sanctity of life or because of a desire to dispose of the burdensome.

Both liberals and conservatives are wrong. Unless liberals are prepared to sacrifice other social goods by devoting all available money to it, health care cannot be made completely egalitarian. Still, a two-tier system need not be unjust as long as those in the lower tier receive decent and adequate health care (which does not mean flying to Switzerland, as the rich can do, to find the world's best cancer specialist). And unless conservatives are willing to put up with unlimited taxes and a deification of improved health as the end point of a decent society, there must be some limits.

# FOUR CONDITIONS FOR LIMITS

But limits make sense and can be just only under four conditions.

Universal Access The first is that that there be universal health care, guaranteeing everyone a decent package of health care regardless of ability to pay. Our present mixed system—market-oriented medicine and a (tattered) safety net in the form of Medicaid—has shown itself incapable of providing a basic foundation of access to health care for all. If society is to impose limits, it must do so according to some kind of centralized system that can set minimal standards of care applicable to everyone and provide the money to pay for it. An extension of the Medicare program, relatively efficient and relatively popular, would do that job most effectively, though it would have to add a prescription drug benefit, which is now lacking.

Public Participation The second condition is that any limit-setting plan must involve public participation. Creating a national commission, with a representative mix of the population, might be one way to do this. However the plan is formed, though, it must persuade the public that the limits thereby established reflect *their* values and priorities, not those of distant bureaucrats or technical experts.

I would stipulate only one important bias in any system of universal health: It should take a population approach to health, not one that gives priority (as is now the case) to individual health. A population approach would seek to understand the main general causes of poor health in the country, the probability of coming down with various diseases, and the behavior roots of unhealthy lifestyles. The first question in setting minimal standards should be: What will promote the best health among the largest number of people?

**Appropriate Goals** The third condition would be to institute a national dialogue on the appropriate goals of medicine and health care. I would focus

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the discussion by using age groups as the main categories: children and adolescents (1-18); midlife adults (19-64); and elderly (65+). What does each age group need to flourish, to carry out the social and individual tasks appropriate for it, and to feel that its basic needs are being met? If we had a population health perspective underlying a generation-based allocation system, our health care system would be best positioned to help people go from birth to old age and death.

A Concern for Economic Implications The fourth condition is that research policy be reoriented in the direction of technological development with an eye on cost implications. At present, both the public and private sector carry out research with no visible interest in the economic implications of the research. As for the private sector-and the pharmaceutical industry in particular-its very purpose is to turn a profit. It is indifferent to cost as long as there are buyers, no matter how inequitable the pattern of their purchases. In the public sector, the National Institutes of Health (NIH), which is focused more on basic research, has never made the cost implications of research a serious consideration (though Harold Varmus, the former NIH director, called attention to the problem in 2000, his last year in office). While it will not be easy to either determine the cost implications of new technologies in their early developmental stages or to put in place incentives that encourage health care organizations to resist paying for those that are too expensive, we must make the effort.

## A FATEFUL CHOICE

We Americans love technology and expect it to get better each year, whether it involves our automobiles, computers, or medical care. If America made no technological progress in health care over the next 20 years, but simply better distributed what is already available—while simultaneously improving public health measures—the results would be stunning. That is not going to happen. But if we could get it into our heads that technological progress now directly *conflicts* with our ability to pay for good health care and our access to it, we would see that it is as much a source of trouble as it is a source of improved well-being. That simple insight would be the beginning of wisdom.

As matters now stand, it seems impossible for most people to believe that something seemingly so good, so productive of past and present benefits, could be harmful. Unless that belief changes, nothing but endless struggle, growing injustice, and missed opportunities to move in other directions will be our fate.