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Eliminating “Waste” in Health Care

Victor R. Fuchs, PhD

PRESIDENT OBAMA IS THE MOST RECENT IN A LONG LINE of US presidents to seek reductions in health care spending through elimination of “waste.” However, the stakes this time are unusually high—the president has reported that eliminating waste is needed to fund two-thirds of the approximately $900 billion needed (over 10 years) for expanded health care coverage. To achieve this goal requires defining waste, identifying contexts in which it occurs, determining why it occurs, and implementing policies that prevent reoccurrence.

Defining waste in medical care is not simple. Consider, for example, a patient who has experienced frequent, intermittent headaches for several weeks. Her physician thinks it is unlikely that the headaches are caused by a brain tumor or lesion (less than 1 chance in 10). A magnetic resonance imaging scan would provide more definite information. If the physician orders the scan, is that waste? What if the chances were 1 in 100 or 1 in 1000? What if the patient is so anxious about the headaches that she has difficulty with daily functions? Should that affect the definition of waste? As another example, consider 10 members of a college football team who are found to have a disease that has 2 possible interventions. Bed rest, fluids, and over-the-counter medications for relief of symptoms would result in recovery of all 10 patients in about 2 weeks; administration of a new, expensive drug would likely cure 7 patients within 2 or 3 days, send 1 patient to the hospital, and have no effect on the others. Is it wasteful to give the drug—or not to give it?

These examples lead to considering 2 possible definitions of waste in medical care. Medical waste is defined as any intervention that has no possible benefit for the patient or in which the potential risk to the patient is greater than potential benefit. Economic waste is defined as any intervention for which the value of expected benefit is less than expected costs. The proportion of care deemed wasteful using the medical definition is much smaller than that deemed wasteful using the economic definition. Medical waste could occur only if the physician is misinformed, if the patient is misinformed and the physician succumbs to patient demands, or if the physician behaves unethically. Economic waste is much more common because of third-party payment.

A conscientious clinician treating an insured patient would tend to recommend any intervention with a potential benefit greater than the potential risk.

Two ubiquitous aspects of medical care make identification of waste particularly problematic. First, there is little certainty in medicine. Implicitly, if not explicitly, physicians are usually dealing with probabilities. Many interventions appear to have been wasteful in retrospect, but that is not the correct criterion; only prospective probability of success is relevant. The oft-heard promise “we will find out what works and what does not” scarcely does justice to the complexity of medical practice. Some interventions are undoubtedly useless, but those that might help some patients are much more common. Second, patients differ in unpredictable ways. The same drug given to patients with the same diagnosis often has different effects, ranging from rapid cure to serious adverse reaction.

Any effort to reduce costs on a large scale requires consideration of economic waste. Where in medical practice is economic waste likely to be found? Almost everywhere. Some patients do not receive sufficient screening because of lack of insurance, inertia, or fear, but for the US population as a whole, the error is probably on the side of excess screening. On a per capita basis, patients in the United States receive almost 3 times as many magnetic resonance imaging scans as those in Canada. Are the benefits of extra scans enough to justify the extra cost? Repeated testing is another area with high potential for economic waste. There is usually little scientific foundation for the appropriate interval between tests and even less economic analysis of benefits and costs of alternative intervals.

For a variety of reasons, including pressure from patients, physicians prescribe brand-name drugs when generic medications would be as effective or no drug at all would be best. An analogous situation may be the choice between a high-cost device or procedure and a less expensive alternative. For example, high-cost drug-eluting stents may be the better choice for some patients, but others would do just as well with less expensive bare-metal stents.

Some patients are hospitalized for what might be wasteful reasons. For example, the patient’s insurance coverage might be better in hospital, compensation to the physician...
for dealing with a complex case on an outpatient basis may be inadequate, or readmission may occur because of poor coordination between inpatient and outpatient care or because the discharged patient lacks social support. Another example is the excess ordering of tests because of “defensive medicine” practiced out of fear of litigation for missing a diagnosis.

Identification of waste is difficult, but eliminating it is more difficult. Every dollar of waste is income to some individual or organization. Insured patients want all the care that might do some good; fee-for-service payment to clinicians also can lead to economic waste. The combination of insurance and fee-for-service can be wasteful because neither the patient nor the physician has an incentive to consider cost. Some see the solution in making the patient cost-conscious through large deductibles and co-payments. That may work for high-income individuals, but the average person who lives from paycheck to paycheck could not handle the typical medical bill. Moreover, the average patient in the United States is a poor judge of what care is needed and the quality of that care. The idea of sick patients shopping for the lowest-price medical care (the way they buy automobiles) is a fantasy that will not contribute to informed elimination of waste. There seems to be no alternative to relying on physicians to practice more cost-effective care.

There are 3 requirements for physicians to practice cost-effective care. First, physicians need information about effectiveness and costs; the range of possible diagnostic and therapeutic interventions available in all but the simplest cases is staggering. The provision of such information in a timely and easily accessible form is a public good that can only be provided by a large, publicly funded but quasi-independent organization. Second, physicians require access to an infrastructure that provides specialized technology and personnel appropriate for cost-effective care, for example, a multidisciplinary, team approach to the care of patients with diabetes. Third, information and infrastructure will often be wasted unless physicians are provided with incentives that reward cost-effective decisions.

President Obama is correct about possible cost reductions through elimination of waste—if the economic definition is what he has in mind. But the president should not underestimate the challenge of implementing policies that lead to such elimination.

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