The highest and best form of efficiency is the spontaneous cooperation of a free people.

—Woodrow Wilson

Efficiency

Getting Clear on Our Goals

MARC J. ROBERTS

Some major fault lines in the current health reform debate arise out of conflicting notions about the definition and goals of efficiency. There is, however, a simple and intuitively appealing concept of efficiency that I believe should be a central virtue of any health reform effort: To be efficient means *to use our resources in the best possible way to achieve our ends*. This makes "efficiency" an instrumental ideal—a goal whose meaning depends on whatever substantive ends we embrace.

Economics offers some distinctions that can help us think about our choices. Consider the distinction economists draw between "static"and "dynamic" efficiency. Static efficiency is a short-run, "at any given moment in time" formulation; it requires that a society operates within a given production process as defined by the available technology and organizational systems. Achieving static efficiency requires production or technical efficiency (ensuring that goods or services are produced at minimum cost) and allocative efficiency (ensuring that the right set of goods are produced and distributed to the right individuals). Dynamic efficiency looks at the long term, but it is not quite so well-defined. It refers to the rate at which our capacity to produce outputs improves over time. Dynamic efficiency requires being efficient in our use of research and development resources in producing new products and processes.

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Defining either static or dynamic efficiency requires us to further specify our aims. We do need minimum cost production regardless of our goals. However, as discussed below, we can only decide what to produce (how to be allocatively efficient) once we specify our goals. Dynamic efficiency requires a trade-off, too, since the more we spend on research today, the less we have to consume today—even if we are better off tomorrow. Moreover, our goals should determine what new products and processes we should try to develop, as well as how to trade current consumption against future gains. When it comes to health policy, two of the most widely used formulations of "efficiency" incorporate very strong assumptions about those goals.

Two Perspectives on Health System Efficiency

Public health practitioners often define the goal of efficiency in terms of maximizing the overall or average health of a target population. As attested to by Web sites full of statistics about overall life expectancy, infant mortality, and so on, much discussion and analysis takes this form. More complicated versions of this approach require us to develop some complex index—like "Quality Adjusted Life Years"—that combines the morbidity and mortality consequences of various diseases. There are enormous ethical and practical problems in such a task, since many important value judgments are subsumed in the process of index construction. For example, how do we value pain relief versus saving lives, or mental health versus physical health? How do we value saving the young

versus the old, or the productive versus the disabled?

This view of efficiency is oriented toward *need*—toward what experts believe will produce the "biggest bang for the buck" in order to make everyone healthy. Historically, the roots of this view—now often called cost-effectiveness analysis—are in engineering and in the use of quantitative techniques to improve military operations during and after World War II (what came to be called "operations research" and "systems analysis"). In those cases, the goal to be achieved was specified in concrete terms like "enemy planes shot down."

The "health/needs" camp includes advocates of "effectiveness research," who push for increased use of clinical protocols and drug formularies and who want to eliminate what they see as inappropriate (and wasteful) variations in patterns of care across the country. They believe we could get more with less if only care was delivered rationally.

By contrast, health care economists typically define "efficiency" in terms of satisfying individuals' desires to the maximum extent possible. (This implicitly assumes that the existing distribution of income is either acceptable or will be "fixed" by someone else). They seek *Pareto optimality*—a state in which no one person can be made better off without someone else being made worse off. Thus being "better off" is defined in terms of each person's own subjective level of well-being.

This approach focuses on *demand*: giving people what they want in order to make them happy. It is embodied in cost-benefit analysis, which was developed after World War II when Congress ordered the Army Corps of Engineers to limit itself to projects for which the "benefits exceed the costs." From the beginning, the task was to value a diverse set of gains and costs in comparable ways. Not surprisingly, these came to be expressed in monetary terms, based on the value that beneficiaries placed on various outcomes.

Those who advocate for consumer-driven health care, higher copayments and deductibles, and the substitution of savings accounts for insurance are in the "happiness/demands" camp. They believe that we can control costs only if consumers compare the benefit of more costly and elaborate care with their potential gains in happiness from, say, more costly and elaborate cars, and choose accordingly.

In terms of static efficiency, both the health/needs and the happiness/demands groups favor improved technical or production efficiency. Both also want to be "allocatively" efficient, but they have different views on what this implies because of their different goals. This is demonstrated in their conflicting attitudes toward fostering generic drugs: the "health" camp most wants cost-reducing changes in practice, while the "happiness" camp is content with innovation that increases cost as well as performance, provided the gains are something people will pay for.

★ Policy Implications ★

In my view, efficiency in terms of health outcomes has to be a major concern in U.S. health reform. We have the highest health care costs in the world among industrial countries (between 50 percent and 100 percent higher than most) and similar—or worse—health outcomes. With roughly 40 percent of all our costs going into nonclinical activities (administration, sales, paper processing, and profits) we clearly could use a major improvement in technical efficiency. And since there is also much evidence that we overuse scarce resources in nonproductive ways, we have major problems with allocative efficiency as well.

Ironically, both the health care economics and public health approaches to efficiency tend to ignore the *distribution* of gains. Equity, as they consider it, is a value that conflicts with efficiency. But this is an illegitimate and rhetorical sleight-of-hand that seeks to capture the social legitimacy of "efficiency" for those not concerned with distribution. A society could surely decide that helping those who get less care, suffer more, and die younger is especially important, and then ask, "Are we efficiently meeting our goals of making the worst off better off?" Indeed, advocates of greater justice within the American health care system would be wise to focus on what I propose to call *distributive efficiency*, since funding for improving equity will always be limited. We must make sure, for example, that "safety net" hospitals that disproportionately serve the poor are every bit as technically efficient as other hospitals—which, alas, has not always been the case.

The only way the impending avalanche of health care costs can be reduced is if we focus our health care research on innovations that decrease costs rather than on innovations that drive them up.

Finally, the biggest health policy challenge facing most industrial countries at this moment is enhancing dynamic efficiency—finding new ways to treat patients that reduce the costs of care. Aging societies, with increasing chronic disease, will face significant cost pressures for many years to come. And the citizens of increasingly wealthy and secular societies are also likely to want more costly health care over time.

The only way the impending avalanche of health care costs can be reduced is if we focus our health care research on innovations that decrease

costs rather than on innovations that drive them up. To do that, we need to create a market for cost-reducing innovations. And to do *that*, we need to move from fee-for-service payment (which often encourages the overuse of expensive new drugs and procedures) to bundled payments for episodes of illness or capitated payments that cover all of a given person's costs for the year. Only then will hospitals and doctors find that efficiency—which research shows, ironically, also often produces better clinical outcomes—is in their interest. And only then will our entrepreneurs and scientists have an incentive to develop those cost-reducing innovations, thereby really increasing our efficiency where it counts. ★