

III. THE HEALTH CARE SYSTEM

3. Bentham in a Box: Technology Assessment and Health Care Allocation

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Jeremy Bentham, the founding father of utilitarianism, would have been delighted by technology assessment. Contemporary health policy planners are, unwittingly, aping the great man's felicific calculus, as they attempt to discern the efficacy and safety of magnetic resonance imaging or cardiac bypass surgery or extracorporeal shockwave lithotripsy. They try to design methods to calculate the effects of these technologies on mortality and morbidity and to compare the costs of one to the costs of alternatives. In recent years, the methods of technology assessment have been refined, but they remain, in essence, a copy of Bentham's proposal to plan and effect a rational course of action and to create a rational world.

The great philosopher and social reformer is, of course, still with us in a dessicated form. He bequeathed his body to the fellows of University College, London, and to this day his mummified figure is encased in a glass box, sitting in his favorite chair, dressed in his own clothes, his waxen face peering out with a bemused smile. He is trundled out from time to time for sherry with the dons. Bentham in his box is, in my opinion, an apt symbol for the boxed-in felicific calculus that is modern technology assessment. It is constrained from drawing into its calculations certain crucial elements and thus, like the mummy of its founder, it is but the lifeless, impotent relic of a powerful and vital way of thinking about, and dealing with, the world.

I venture this bizarre and exaggerated image in order to make vivid my thesis about our current efforts to allocate health care resources and to ration medical technologies. We labor under a cribbed, cabined, and confined way of thinking about allocation of medical care; we are as constrained as the great man in his box and we cannot, any more than he can, exercise power and control over the distribution of health care. I shall explain my thesis in several steps: first, by saying something about the philosophers' endeavors to elucidate a theory of justice about health

care; second, by relating my personal experience with technology assessment; and third, by stating the reason why I believe we have, and are possibly destined to have always, a boxed-in approach to the problems of health resource allocation.

First, a word about the philosophers' endeavors. During the last few years, the attention of philosophers has been drawn to the problem of justice in health care. A somewhat neglected problem, it moved up the agenda with the research generated by the President's Commission for the Study of Ethical Problems in Medicine and Biomedical Research for its report, *Securing Access to Health Care*. Many fine studies were prepared in the course of that research. At the same time, in the political and social world, the costs of care had caught the attention of policy-makers and the Reagan administration had begun its retreat from—or should we say, its attack on—the federal

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subvention of health care in the United States. The conceptual problem and the practical difficulties combined to bring the issue of just and fair allocation of health care to the head of the agenda, just as it was at the top of the agenda of the Sydney '86 conference. A few years ago this topic was always the last session in bioethics conferences.

The philosophers rightly noted that a theory of justice was needed to resolve the practical problems of just and fair allocation. Several very interesting attempts have been made to supply this theoretical approach. All those efforts have their strengths and weaknesses, which I shall not detail here. I merely want to point to an issue little noted by the philosophers, because of the level of generalization at which they work. All efforts to sketch a theory of justice about health care refer to the utility of medical intervention. It is obvious that there is a problem of just distribution only if that which is to be distributed is a good. Thus, the philosophers presuppose that in some

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sense, and in some form, health care activities are beneficial.

The President's Commission report concludes that it is the duty of society to assure equitable access to an adequate level of care for all. It described that adequate level as "enough care to achieve sufficient welfare, opportunity, information and evidence of interpersonal concern to facilitate a reasonably full and satisfying life." As Norman Daniels notes, this description shares with his own "[a] certain abstractness, that sanctuary for philosophers and den of inequity for health policy planners."¹

One way to descend from that abstractness is to inspect with great attention the various forms of health and medical care, in order to determine the extent to which they actually do effect, on the whole, the benefits desired.

Technology assessment is one way in which that work is carried on. This art is still quite undeveloped, but it is improving in sophistication and extent. In my exaggerated simile—technology assessment is like Bentham in his box—I alluded to the similarity between the modern methods and the felicific calculus. This was, of course, a somewhat facetious allusion. Modern health planners are not avid readers of Bentham, Mill, or Sidgwick; they are not utilitarians in theory. But they are, to some extent, utilitarians in practice; the question they ask is whether a particular technology can be shown, in some quantitative way, to effect more benefit than harm in relationship to alternatives. In the words of the President's Commission, "The level of care deemed adequate should reflect a reasoned judgment not only about the impact of the condition on the welfare of the individual, but also about the efficacy and costs of care itself in relation to other conditions and the efficacy and costs of care available for them."²

These words are the familiar vocabulary of the utilitarian language, even though they are spoken, like Australian (Strine), at some distance from the mother tongue. During the last decade, I have been involved in several major efforts at technology assessment. I served on two National Institutes of Health working groups to assess the artificial heart, on a Department of Health, Education and Welfare project to assess cardiac transplantation, on an NIH committee to assess amniocentesis, and on a State of California Task Force on liver transplantation. I am now a member of the Medical Advisory Committee of National Blue Cross-Blue Shield, which issues advisory opinions about the efficacy of old and new medical technologies—everything from autologous bone marrow transplantation to neonatal circumcision. Since I am an ethicist, not a health planner, it has usually been

my assigned task to point out the ethical, moral, and social implications of these technologies, a task I have always found extremely difficult.

Still, despite the difficulty, I continue with these activities because I find them extremely revealing for

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the problem of allocation of health care. It is at this level, rather than that of ethical theory, that the allocation policy can be determined. If Bentham were with us in person rather than in relic, he might be involved in such activities, just as he was in prison reform, legislative reform, and sanitary reform, for he was much more of a social activist and planner than a social philosopher and theorist. And if he were the member of a working group on the artificial heart or on liver transplantation, he would, I think, notice the barrier to the complete assessment of social utility to which I have referred.

That barrier is our practical incompetence in dealing with life-saving or life-sustaining technologies. Many of the technologies under assessment relieve illness or pain or disability, but do not directly save life, do not rescue people from imminent death. Those technologies that do stave off death and sustain life pose a particularly daunting problem to the assessor; they interpose into the miniature felicific calculus a barrier difficult to climb, a chasm difficult to leap: namely, the imperative to rescue endangered life.

Major organ transplantation and implantation are the most striking examples of these technologies. Our working groups were able to calculate the extent of possible use, the potential efficacy, and the costs of these technologies. The artificial heart, for example, might annually bring four years of extended life to some 25,000 persons, at a cost of some \$100,000 per life saved. Allowing these people to die without any treatment for cardiomyopathy would be much less costly, since the alternative for them is not a lifetime of expensive chronic care but death. Also, the burden of paying for these transplants might eventually pinch the nation's health resources budget, depriving many of less dramatic but nonetheless life-enhancing forms of care. Should we encourage the development of the artificial heart? Of course we must, it is said, because it rescues the doomed from certain death. And those doomed to death are certainly quite visible individuals—Dr. Barney Clark, William Schroeder, Baby Jamey Fisk, and Baby Jesse, my son, your wife, the

nice man next door—rather than the invisible multitudes who may die of exposure to toxic chemicals, cigarette smoke, or radiation, or those deprived of immunization or adequate nutrition. We reach a conclusion contrary to the utilitarian principle: We benefit a few at cost to many.

This occurs only when technology assessment becomes specific and explicit. The barrier will not rise up if we let these life-and-death decisions slip by, politely unnoticed, in a general rationing or allocation policy (as the British National Health Service learned to do long ago). But if we work at explicit evaluations of single technologies, the barrier is bound to appear.

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I call this barrier the rule of rescue. Our moral response to the imminence of death demands that we rescue the doomed. We throw a rope to the drowning, rush into burning buildings to snatch the entrapped, dispatch teams to search for the snowbound. This rescue morality spills over into medical care, where our ropes are artificial hearts, our rush is the mobile critical care unit, our teams the transplant services. The imperative to rescue is, undoubtedly, of great moral significance; but the imperative seems to grow into a compulsion, more instinctive than rational.

I am, of course, familiar with what the philosophers call deontological principles: principles that command or forbid absolutely, regardless of the consequences. I had read about them, and thought about them, but I had never come smack up against one until engaged in the assessment of a life-saving technology. The evidence appeared to be leading to the logical and reasonable conclusion that the technology was not cost-effective. Before that conclusion could be drawn, however, the rule of rescue threw up an impassable barrier. The logical conclusion of the assessment faltered and fell, and the technology—hedged around with cautions, to be sure—won the day. Renal dialysis was such a victor in the 1960s; major organ transplantation recently carried off a federal task force.

This then is Bentham in a box: the rational effort to evaluate the efficacy and costs, the burdens and benefits, of the panoply of medical technologies—an effort essential to just and fair allocation—encounters the straitened confines set by the rule of rescue. Even

the soundest consequentialist arguments against that rule seem unable to break out of the box.

Appeals to quality of life or to the impact of a technology on society or culture carry little weight, probably because they lack the force of quantification that is the strength of utilitarian arguments. Thus, as we find ourselves becoming more and more skilled at sorting out the efficacious from the useless and the cost-efficient from the wasteful, we find ourselves, at the same time, unable to extend our felicific calculus to the very expensive technologies that will rescue the relatively few.

The rule of rescue is indeed a deontological imperative. Utilitarians are not fond of deontological imperatives. Bentham's progeny devised many ways to interpret them, diminish their power, or banish them from moral discourse. But I am speaking of practice and policy and planning, not of philosophical theory. Even the most evangelical utilitarian would find it difficult to expunge the rule of rescue from the psychological dynamics of technology assessors. As a law reformer, Bentham would have had to take account of this strong imperative that resists the rational authority of the utilitarian principle.

I am not repudiating the moral significance of the rule of rescue. I am not claiming that this impasse is either salutary or malign; I am not suggesting that we are better off living within this limit or breaking through it. I merely report my experience with serious, conscientious efforts to discern the utility of medical technology, and I will close by posing the questions that my experience has raised for me. Should the rule of rescue set a limit to rational calculation of the efficacy of technology? Should we force ourselves to expunge the rule of rescue from our collective moral conscience? How should law deal with this powerful moral imperative? Might a world with less cost-effective health care be a morally better place? Perhaps we should resuscitate the estimable and eccentric Bentham—provide him with artificial heart and brain—and free him from his box so that we may ask him that same question. I do not know what a revived Bentham might answer.

References

1. N. DANIELS, *JUST HEALTH CARE* (Cambridge University Press, 1985) at 82.
2. *PRESIDENT'S COMMISSION FOR THE STUDY OF ETHICAL PROBLEMS IN MEDICINE AND BIOMEDICAL RESEARCH, SECURING ACCESS TO HEALTH CARE* (Washington, D.C., 1983) at 36.