

Policy Analysis and the Health Care System

A role is proposed for the Institute of Medicine

William B. Schwartz

In the years ahead there will be a major restructuring of the health care system that will place enormous demands on our capacity for planning and implementation. But the record of the past decade provides little evidence of our ability to meet the challenge. The Medicare-Medicaid legislation bears dramatic witness to our shortcomings and offers a glimpse of the kinds of difficulties that can be anticipated. In retrospect it is easy to see that one of the fundamental errors in the design of the programs was the almost exclusive concern with payment and the virtually complete indifference to the problem of increasing the supply of services in response to a predictable rise in demand. Given the relative inelasticity of supply, at least in the short run, it is not surprising that there have been, first, a staggering rise in costs as the newly insured have used their medical dollars to compete for a larger share of a fixed supply of services, and, second, ever longer queues as the physician's time has become a limiting factor in health care delivery. It is reasonable to ask why these considerations were not given sufficient attention when the legislation was drafted. The answer is not simple, for several factors were involved; but pressure from the public for quick action and a primary interest on the part of Congress in the insurance aspects of the problem were certainly among the elements that played a significant role (1).

It is not likely that difficulties such as those encountered with Medicare-Medicaid will disappear when we tackle

the even larger problems related to a national program of universal health services; in fact, it is probable that the spectrum of difficulties will be even wider. It would follow that to resolve any substantive problem in health care we must first devise processes and institutions adequate to the task of dealing with such complex issues. Indeed I would suggest that a primary goal of the Institute of Medicine, beyond the consideration of areas for specific study, might appropriately be a definition of how, over the long run, it can make its most effective contribution to policy formation.

The Nature of the Problem

Although the critical problems to be faced are diverse and seemingly varied in character—involving as they do such matters as health insurance, manpower, new technology, and education—they in fact share characteristics that may provide the basis for applying a common strategy for their solution. Typically, the problems require government action and involve decisions on the allocation of a large proportion of scarce resources. They are complex, involving dynamic systems that seldom behave as intuition might suggest. They involve issues of equity—many groups both within and without government having vital interests in the outcome of the decision-making process: consumers, physicians, hospitals, drug manufacturers, and various agencies of local and national government, to mention but a few.

These considerations would suggest, first, that if analytic activities in health care are to be a meaningful force for change they must be undertaken within the forum of the political process, not

carried out in ivory tower isolation as rational intellectual exercises. Second, there is a clear implication that the problems will require a multidisciplinary approach; we are not simply dealing with economic problems to be formulated and analyzed by economists or manpower problems to be dealt with by physicians. The problem of delivery of primary medical care, for example, obviously has an enormous number of facets. It is not merely a question of more medical schools training more physicians, but a range of issues including the maldistribution of physicians, inducements to rural and ghetto practice, restriction on the entry of physicians into specialties already overpopulated, the use of allied medical personnel to replace physicians in the delivery of primary care, the introduction of computer-aided diagnosis and management as a means of upgrading the non-physician's performance, the use of television as a link between doctors and patients, and the introduction of new transportation strategies as a means of making high-quality care available to areas of low population density. In weighing these approaches, consideration must also be given to the patient's acceptance of new personnel and new technology, to the reliability of computer-aided diagnosis and management, to the response of the physician to incursions of new health personnel and new technology into his domain, to legal problems related to licensure and malpractice, to the time lags involved in the introduction of each new strategy, and to the trade-off between quality and quantity that is implicit in changing the traditional patterns of health care. Only in this way can we allocate resources appropriately and bring a desirable mix of manpower and technology to bear.

The above list, which is by no means exhaustive, indicates the complexity of the manpower issue, but more important, since it is prototypical, suggests that most major problems in health care will require for their solution the interaction of a variety of experts drawn from the fields of medicine, economics, law, the social sciences, architecture, computing science, bio-engineering, statistics, and a variety of other disciplines. And, not to be forgotten, is that at each point in the deliberative process the voice of the consumer must be heard if programs are to be shaped to meet perceived community needs and to gain community acceptance. Parenthetically, I must

Dr. Schwartz is professor of medicine and chairman of the department of medicine at Tufts University School of Medicine, Boston, Massachusetts 02111. This is the text of a talk given at the meeting of the Institute of Medicine, National Academy of Sciences, Washington, D.C., 10 May 1972. Minor corrections have been made by the author.

confess that it is not clear to me how this latter goal can best be achieved, but the issue must certainly be faced.

Finally, it has become painfully evident that the solution of major social problems cannot be successfully devised on the basis of rational analysis alone. From the experience of the 1960's with a variety of social programs, it has become abundantly clear that one cannot foresee all the pitfalls that will be encountered when a new program is introduced into the real world and therefore that social experiments must become an increasingly important tool in policy formulation.

A New Commitment to Health Policy Analysis

All these considerations, in my view, argue compellingly that future planning efforts in health will require the *full-time* ongoing commitment of groups of analysts whose only concern is with policy. The intellectual and political issues are too complex, and the problems of communication across disciplinary boundaries too difficult, for success to be achieved by any but a multidisciplinary team engaged in constant joint study and experimentation.

Before pursuing this theme further, I should point out, of course, that some problems need not be dealt with in the fashion I have just outlined but can be resolved effectively, and much more simply, by means of the traditional committee or commission approach—sometimes called a bit facetiously, “problem solving through the casual assembly of wise men.” Most such problems, however, are of relatively limited scope and significance and usually have as a dominant theme the issue of technical evaluation, typically involving an appraisal of effectiveness or of impact. The evaluation of drug effectiveness or of criteria for establishment of a national program of heart transplantation are examples of such issues. But these are not the problems that will fundamentally shape the future of the health care system in this country, and therefore I believe that the institute, instead of devoting the major portion of its energies to such matters, should give high priority to the development of an analytic capability best suited to coping with the larger, more complex, and more critical issues.

Perhaps the important role the institute might play in this regard can best

be appreciated from a consideration of the remarkably sketchy apparatus for health policy formulation in the United States today. I would argue that this apparatus—understaffed, underfunded, and poorly organized—is in need of substantial strengthening at the several critical sites where national health policy is shaped, or at least strongly influenced.

There seems little doubt that important benefits would accrue if the capability for health policy analysis in the Department of Health, Education, and Welfare (HEW), the Congress, and the extragovernmental public sector were not only expanded but also linked in an informal network of communication to facilitate the contribution that each, in its unique fashion, could make to the common good.

It is remarkable that HEW, with its enormous responsibilities, has at the secretariat level only a small handful of individuals dealing with health. Furthermore, these analysts are, by necessity, preoccupied with short-term issues of importance to current legislative decisions and are heavily constrained by political exigencies. As a result, they are often forced to forego the luxury of objectivity and generally must put aside extensive exploration of long-term issues, no matter how major. There can be little doubt that strengthening this group in numbers and disciplinary representation is a desirable goal. But in addition any restructuring should also take cognizance of the need for creating an environment in which some fraction of the effort can be devoted to problems whose time frame is measured in years rather than in weeks or months. In such a highly politicized environment as HEW, this would obviously be a difficult task.

The situation in Congress is at present even more remarkable and disturbing. The combined staffs of the House and Senate subcommittees on health number only some half-dozen individuals all of whom are primarily involved with practical problems relating to hearings, preparation of legislation, and other pressing day-to-day matters. Only to a negligible extent can they devote their efforts to what might, under the most liberal definition, be defined as policy analysis. Given the enormously important policy choices constantly confronting congressional committees concerned with health, I believe that it could reasonably be argued that an analytic capability of some substance should be established to provide sup-

port on a bipartisan basis to the legislative process. Such an approach is not unprecedented in the Congress; the House Ways and Means Committee, for example, has a large full-time staff devoted to tax matters.

The Extragovernmental Sector

However, it seems obvious to me that improved analytic capability within the government is not in itself sufficient. Inevitably, no matter what the safeguards, pressures of all sorts will be brought to bear on the analyst working close to the heat of the political process. There will thus be an important place for extragovernmental groups, devoted exclusively to dispassionate inquiry pursued in the public interest, which can direct the largest part of their energies to the longer-term issues requiring in-depth analysis and experimentation.

Some have suggested that the most appropriate setting for extragovernmental health policy studies is the universities, but the academic environment clearly has serious drawbacks. As was pointed out recently by Levien, the incentive structure within the university militates against the effective prosecution of interdisciplinary analytic efforts inasmuch as rewards to faculty are based primarily on publications in scholarly journals and the training of graduate students within a particular academic discipline (2). Academic advancement and prestige among one's peers are not likely to flow from participation in goal-oriented projects directed toward problems of public policy (3). In my view a more promising approach would be to establish several experimental programs under organizations like the Institute of Medicine, a prestigious foundation, or an independent public policy analysis organization such as the Brookings Institution or the Rand Corporation. The Institute of Medicine, because of the composition of its membership and its primary commitment to problems of health, would appear to offer a particularly felicitous setting in which to establish a center for health policy research.

Because the institute represents the National Academy of Sciences in matters relating to health, the studies of a group working under its aegis would have high visibility and would be difficult to ignore. Furthermore, such a center would create the opportunity for an expanded and valuable role for

institute members—allowing them to contribute to the study of broad policy issues under examination by the full-time analytic group, as well as to studies of the more limited scope best suited to the commission technique. One can well visualize the members functioning as consultants to the institute's policy center or even of spending brief periods in residence. This kind of interaction with the institute's policy analysts might well provide the most effective means of harnessing the unique reservoir of skills and experience of a membership that has many other responsibilities and demands on its time.

Constraints to Be Faced

Obviously, for policy analysis to have an important impact on policy formation, a number of constraints will have to be overcome. For example, a policy group functioning in the extragovernmental sector, and thus without a direct role in decision-making, must concern itself not only with rational analysis but also with political reality. Indeed, a close relationship to government planners and to others concerned with the shaping of health policy will be essential to the group's effectiveness. Although it is doubtful that a formal relationship with the analysts in HEW or the Congress would be desirable, creating the risk as it would of weakening the independence of the institute, a continuous informal dialogue would be valuable, and indeed necessary, if the institute's work is to have a significant impact. Several mechanisms could be utilized to further this goal. The policy center might, for example, indicate a willingness to respond to occasional requests from Congress or HEW for immediate help with urgent problems, even if such "firefighting" activities were sometimes distracting. There is little doubt that such assistance, if of high quality, would greatly enhance the credibility of the institute among those close to or responsible for the decision-making process, creating channels for a dialogue on all issues of concern to the institute. Another possible strategy would be to invite staff of national and local government agencies concerned with health to spend a few weeks, a month, or even a year in residence working on policy problems. In this way they could gain experience with a wide variety of analytic disciplines while enriching the ongoing work

with their own expertise. Similar invitations could go, for example, to medical school deans, nursing leaders, and hospital administrators, thus furthering the important goal of creating a cadre of decision-makers who would share a common conceptual and analytic framework.

I believe that the major constraint we are likely to encounter as we attempt to expand the analytic capability in health, whether in the governmental or extragovernmental sector, is the shortage of qualified personnel. The number of economists, physicians, computer scientists, lawyers, architects, and other experts who are qualified by training and experience to work in the health policy field is sharply limited. To recruit such individuals will require that the opportunities be made particularly attractive in terms of prestige, salary, duration of appointment, and professional challenge. Of equal importance will be the encouragement of new training efforts designed to expand the existing pool of analysts, and it is probably in this role that the university's function can best be fulfilled. Only with such an expansion of manpower will it be possible to launch more than a severely limited number of high-quality analytic efforts. Certainly, a major national enterprise, such as envisioned in a recent bill proposing a National Institute of Health Care Delivery, would at present face as its most serious problem the recruitment of the requisite number of skilled and talented personnel.

Finally, we should turn to an even more fundamental, and perhaps more serious, concern. Despite the intuitive feeling that a rational approach to planning should provide an effective tool for dealing with complex social problems, there is still, as was recently pointed out by Walter Williams, no objective evidence that the analytic approach has made an important contribution to the solution of any major social problem (3). Efforts during the last decade, designed to deal with such problems as compensatory education, manpower retraining, and public housing, in which modern techniques of policy analysis were brought to bear with great optimism, have yielded few if any striking successes (3, 4). The explanation for this disappointing result apparently lies, at least in part, in the failure of the analysts to appreciate the complexity of the task they were facing—a faith in the power of rationality to sweep away all obstacles. Clearly

this judgment was faulty, failing as it did to consider the wide range of obstacles that will not readily yield to master planning. It is now evident that the shortcomings of the analytic technique, the absence of pilot field studies before the launching of major national programs, and the many unappreciated political and social barriers to program implementation, particularly at the community level, contributed to the disappointing results. Perhaps we can reasonably anticipate that the lessons learned will be taken to heart and will lead to greater accomplishment in future planning efforts. There are, however, those—in particular Donald Schon—who argue that the difficulties run far deeper than most analysts are currently aware and that the fundamental obstacle lies in the fact that social change occurs with such speed that solutions arrived at by even the most sophisticated analysis and experimentation are typically obsolete before they can be implemented (5). Schon believes that analysis can contribute effectively only if it is carried out as a continuous learning process and that new strategies for dealing with this reality must be devised. There are even more pessimistic observers who argue that the limit of rationality as a technique for solving major social problems has now been reached (6).

At the same time we must ask, "What is the alternative?" Our present policy of "muddling through" is virtually bankrupt, and we therefore have little choice but to turn to the orderly process of reason, analysis, and experimentation. Since the costs would be low, and the rewards of even partial success great, there seems to be every reason to attempt to create new mechanisms to integrate rational health policy analysis with the political process. The Institute of Medicine, by establishing a center for policy studies under its aegis, could contribute importantly to the dialogue.

References

1. W. Gorham, "Ignorance is blissless for government," speech given as part of a lecture series commemorating the General Accounting Office's 50th anniversary, Washington, D.C., 16 August 1971 (in press).
2. R. E. Levien, *Independent Public Policy Analysis Organizations—A Major Social Invention* (Rand Corporation Publication P-4231, Santa Monica, Calif., 1969).
3. W. Williams, *Social Policy Research and Analysis: The Experience in the Federal Social Agencies* (American Elsevier, New York, 1971).
4. A. M. Rivlin, *Systematic Thinking for Social Action* (Brookings Institution, Washington, D.C., 1970).
5. D. A. Schon, *Beyond the Stable State* (Random House, New York, 1971).
6. R. L. Bartley, "On the limits of rationality," *Wall Street Journal*, 10 September 1971.