Technology Assessment, A Private-Public Partnership

Any description of the Public Health Service's role in technology assessment is complicated by the many different definitions of "technology." In my own mind, the term "technology" includes not only the drug, device, or medical procedure under consideration, but also the knowledge and professional competence needed to apply that drug, device, or procedure safely and effectively on behalf of patient care. I would include in the definition the facilities, personnel, and health care delivery systems needed to deploy today's complex medical procedures. The study of these systems is exactly what health services research is all about.

The component of the Public Health Service (PHS) that conducts such research is the National Center for Health Services Research (NCHSR). The Center provides a health services research context for technology assessment activities. Its extramural program includes investigator-initiated projects to develop methods to study the clinical benefits and costs of specific technologies; the factors influencing technology use, dissemination, and financing; and the cost and effectiveness of medical techniques. Some examples of this research:

- A prospective study to compare the accuracy of diagnostic predictions generated by the Duke University Databank on Coronary Artery Disease with the accuracy of predictions made by the patient's physician.
- An analysis of the cost effectiveness of hysterectomy for nonmalignant disease.
- An assessment of changes in radiology practices and procedures as a result of imaging technologies such as CT scan and NMR (nuclear magnetic resonance).
- A study of the diffusion of technology in U.S. hospitals for the decade 1972–82.
- The development of an X-ray screening protocol for injuries of the extremities.

The Center's Office of Health Technology Assessment (OHTA) is responsible for providing the PHS's advice to the Health Care Financing Administration (HCFA) with respect to Medicare coverage of medical technologies that are not presently covered. Briefly, the process works as follows. When inquiries regarding the coverage of medical technologies are received by HCFA, a physician's panel, established by HCFA, reviews the issue. This panel includes a representative from the Office of Health Technology Assessment. If the panel determines that a full assessment of the safety and efficacy of the technology is required, it refers the question to NCHSR. OHTA staff consult with appropriate scientists and experts from PHS agencies, review the available scientific literature, solicit views from relevant medical specialty and subspecialty groups, and provide an opportunity for the developers of the technology to supply additional information that they wish to have considered. A preliminary assessment document is prepared and sent to the agencies of the Public Health Service for comment. The final assessment is then forwarded to HCFA for the decision as to coverage.

Once the actual decision concerning Medicare coverage is made, the Health Care Financing Administration, through a formal instruction, notifies its contractors and fiscal intermediaries of its decision. State Medicaid agencies are also notified because their agencies often base their determination for coverage on the OHTA assessment. In addition, the NCHSR disseminates its assessment to insurance companies and other interested groups. OHTA assessments are also reported in the Annual Technology Guide published by the American Hospital Association.

It should be remembered, however, that technology assessment within the PHS includes much more than providing advice to HCFA on Medicare coverage issues. Activities include primary data collection, secondary data analysis and synthesis, development and continued evaluation of methodologies, and information dissemination. A summary of these activities follows.

- *Primary data collection.* Collecting the primary data needed in technology assessment is performed and supported primarily through research activities of the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration, in particular through the support of clinical trials.
- *Secondary data analysis and synthesis.* These activities are conducted primarily by the NCHSR in its support of health services research and in the development of recommendations regarding Medicare and coverage issues, by the National Institutes of Health in its consensus development conferences, and by the Food and Drug Administration in the regulation of drugs and medical devices.
- *Development and continued evaluation of methodologies.* NCHSR has primary responsibility to conduct research into refining the methods of assessing technologies.

• *Information dissemination.* All agencies of the Public Health Service engage in information dissemination, but the largest single institution with this function is the National Library of Medicine. Additionally, the NCHSR disseminates its research findings to approximately 3,000 agencies and individuals in the form of research activities reports.

I believe that the Public Health Service provides valuable services in three areas: (*a*) in primary data collection for use by others doing technology assessment; (*b*) in the development, validation, and continuing evaluation of methods for assessing technologies; and (*c*) in continuing to provide HCFA with assessment of health care technologies.

The activities that I have described are rather circumscribed, however, and they should be supplemented by professional associations and others.

I believe that PHS activities in technology assessment must be linked with research in health services delivery. Medical technologies cannot be evaluated effectively unless they are examined within the environment where they are used. Furthermore, the function of technology assessment should properly draw upon the knowledge and skill of those at the National Institutes of Health; Alcohol, Drug Abuse, and Mental Health Administration; Food and Drug Administration; and the Centers for Disease Control.

Over the last year we have been reevaluating what the role of the Public Health Service should be in technology assessment. Questions we have asked are: Should we assume full responsibility for technology assessment in this country? I think not. Should we assume greater regulatory authority over the use of new technologies? Again, I think not.

In response to the first question, new information is being developed at too great a pace and over too wide a spectrum of clinical medicine to leave the assessment process solely to the Federal Government. I also believe that the medical profession, manufacturers, and third-party private payers need to participate.

In answer to the second question, the PHS is not in a position to make decisions about who should receive a particular technology, or who should provide that technology, or where the technology should be provided. It is our responsibility to provide the best clinical and scientific information about new medical technologies to the Health Care Financing Administration and to the public. We have that responsibility because of the need for the Federal Government to maintain a responsible stewardship over the Medicare trust fund. We also have a responsibility to administer faithfully the regulatory laws over drugs and devices. Beyond that, I believe that it is the responsibility of the private sector to make its own decisions about the purchase and use of new technologies.

I believe that technology assessment in this country would be best served by a private-public partnership. To this end, the National Center for Health Services Research has recently begun to develop a plan to clarify and strengthen the PHS role in technology assessment. We are also working with the Institute of Medicine to plan for a consortium within the private sector to assess medical technologies. We continue to be optimistic that such a consortium will emerge, and we look forward to cooperating in such a venture.

A public-private partnership in technology assessment would also take advantage of the important work already done by such groups as the American College of Physicians, American Medical Association, and the American College of Cardiology. The continued participation of these organizations in technology assessment is critical. The PHS cannot and should not duplicate the valuable and important role of these groups. A heavy-handed Federal role, whether perceived or real, has not worked in the past and it will not be accepted for the future.

Edward N. Brandt, Jr., MD, PhD
Assistant Secretary for Health

Meeting the Health Care Needs of Children with Disabilities: A Progress Report

In an earlier editorial in this journal (*1*), I discussed a Surgeon General's Workshop convened in December 1982 to address the problems and needs of children with handicaps and their families. Participants included not only national experts in pediatrics, habilitative medicine, nursing, health care administration, third-party reimbursement, health planning, and health care financing, but handicapped patients and their families as well.

Two days of deliberation resulted in seven major recommendations from the workshop participants for action to address the special needs of children with disabilities. Many activities, projects, and publications were stimulated by the workshop, building on some initiatives already in progress. Now, a year and a half later, it seems appropriate to report on some of these efforts as they relate to the specific workshop recommendations.