TECHNOLOGY: A MORAL EVALUATION

Ethical

ore and more healthcare institutions, both hospitals and systems, are engaging in technology assessments. The current interest in technology assessment stems largely from the desire to effectively manage the escalating costs associated with the use of high-technology medicine. Managerial considerations include a broad range of concerns: defining what constitutes medical technology, its goals, and objectives; monitoring the use of current technologies and tracking new and emergent technologies; and developing guidelines for purchasing new technologies and using them in costeffective ways. Most often the justification for the purchase and use of technology indirectly hinges on patient benefit and quality issues.

MORAL FOUNDATIONS

The Roman Catholic moral tradition provides a much more direct method of evaluating the use of medical technology. The richness of the tradition is rooted in the promotion of human values derived from the Gospel and in the flexible application of principles and a moral framework that embodies a dynamic interpretation of the relationship among intentions, means, and ends. By reviewing the purpose of life—the ultimate end of life as confirmed by the tradition—institutions can achieve a balanced perspective on the development and use of technology.

Christian existence as defined by Catholicism is

Questions
On the Use
Of
Technology
From a
Macro and
Micro
Perspective
By SR. JOANNE
LAPPETITO, RSM

oriented toward God. Through creation and the gift of life itself, God invites us day by day to enter into the fullness and glory of God's life. The tradition has consistently proclaimed our life in God as the end and purpose of human existence and, in doing so, has demonstrated how a broad range of human goods are important and necessary to human existence but only insofar as they enable Christians to attain their God-given destiny. Medical technology is one such social good.

In the encyclical "Mater et Magistra" (1961), Pope John XXIII commends the development of science and technology as profound expressions of human ingenuity and as outstanding contributions to society. At the same time he cautions us "to realize that these things are not the highest goods, but only instruments for pursuing such goods" (no. 175).

Within the same encyclical Pope John XXIII deliberately reasserts the value of the human person. The Church holds the human person in such esteem that the products of human inventiveness which we so highly prize are to be valued only to the extent that they promote and enhance human welfare. The contrast between ends and means is not only significant but also clarifying. When the encyclical states, "Individual persons are necessarily the foundation, cause, and end of all social institutions" (no. 129), the document leaves little doubt that technology is made for the person and not the person for technology. "Mater et Magistra" makes it clear that technology provides the "material conditions in which individuals are enabled to lead a full and perfect life" (no. 74). Technology is a means to an end. The end the encyclical envisions is a full and perfect life-Christian existence that is responsive in love to God's abiding, renewing, and healing presence.



Sr. Lappetito is senior associate for corporate and social ethics, Catholic Health Association, St. Louis.

MACRO EVALUATION OF TECHNOLOGY

Accepting the meaning of life from a Gospel perspective, preserving the dignity of the person, and distinguishing means from ends will facilitate an evaluation of technology; but technology needs to be evaluated from a macro and micro perspective. The macro perspective addresses structural and systemic questions; the micro, individual patient care issues.

The macro perspective raises moral questions about the development, manufacturing, and distribution of medical technology, and it compels us to ask the larger societal questions about the relationship of healthcare to other social goods.

As a society, we Americans must determine to what extent we value health and healthcare. At times we seem to believe that medicine and medical technology will be able to conquer disease and overcome aging and death. At these times our religious beliefs must critique our vision of life and reassert once again that life's quest is not immortality, but union with God. As we practically redirect our faith from trust in technology to trust in God's abiding love for us, we must ask some very old questions anew: What is the purpose of health? Although good health is a value, is it an end in itself? These questions precipitate a shift in the focus of our questioning from immortality to longevity. Is the purpose of medical progress to sustain or prolong life indefinitely? If we integrate the religious purpose of life into the fabric of our being, emotionally as well as intellectually, we can achieve a more balanced perspective about health and healthcare; our purpose in life defines the value we prudently and rightfully place on health and healthcare.

The fiscal imbalance surrounding healthcare is a sign of a system gone awry. The escalating costs of healthcare call into question our need as a society to reconcile the imbalances created among competing social goods. Education, which has a direct impact on our society's future, is one such competing social good. More than a decade ago Americans invested about 7 percent of the gross national product (GNP) in education and another 7 percent in healthcare. Now, healthcare consumes 14 percent of the GNP, and it is expected to consume more than 18 percent in the near future, while spending on education continues to shrink to well under 7 percent.

How much healthcare is enough? The development, manufacturing, and distribution of medical technologies also raise a host of ethical questions. In far too many instances the originating thrust of research is unrelated to community need. The focus of research tends too often toward the more dramatic and costly technologies that enhance the

Research too
often focuses
on dramatic
and costly
technologies
that affect only
a few personal
lives. Research
on chronic
illness does not
attract the same
amount of
attention.

lives of only a few persons. Research directed toward chronic illnesses does not attract the same amount of attention or research dollars. Who has access to medical technologies and who makes the decisions about access are questions of justice.

Marketing techniques related to new technologies raise additional ethical questions. The proliferation of new pharmaceutical and medical technologies arises from the newly developed medical-industrial complex and is market driven. The economic forces impelling the development of new technologies help sustain the erroneous concept that healthcare is a commodity. Large technology and pharmaceutical companies employ a broad range of advertising strategies, including media events. The desired outcome is the creation of need, but too often this need is unrelated or detrimental to the treatment of a particular disease. Even more harmful is the long-term effect: higher and more unrealistic expectations placed on medical technology.

MICRO EVALUATION OF TECHNOLOGY

The rapid proliferation and diffusion of medical technology has changed the practice of medicine. The clear clinical definitions once used with certainty in the analysis of ethical dilemmas are now blurred. Misunderstandings plague do-not-resuscitate orders, and a debate rages around the meaning of futile treatment and the difference between ordinary and extraordinary measures.

Another important issue—related to both structure and patient care—is the inadequacy of trials to confirm the safety and efficacy of new technologies. The number of subjects is often too small; the reporting, incomplete and inaccurate; and outcome studies, too limited, biased, and inadequate. The breast implant scandal is a recent example of abuse. Statistics demonstrate that fewer than half the medical and surgical innovations introduced into the market are improvements over standard practices (Diana B. Dutton, Worse Than the Disease: Pitfalls of Medical Progress, Cambridge University Press, Cambridge, MA, 1988).

Perhaps the most difficult issue is that of futile treatment. When the outcomes and therefore the benefits of a new device or pharmaceutical are uncertain or, at best, marginal, should it be used? When such uncertainty reigns, patients stay in the hospital longer and leave sicker and more debilitated, more dependent and vulnerable. These conditions often negatively affect patients' physical, psychological, social, and economic well-being and may lead them to consider suicide.

The questions that were asked on the macro level must be posed to individual persons: Is the Continued on page 79

TECHNOLOGY: A MORAL EVALUATION

Continued from page 49

The use of technology without moral wisdom can destroy the good it is seeking to serve.

goal of the patient's life immortality or longevity? Does the Christian meaning of death and resurrection help the patient make sense out of his or her life or the experience of suffering? When a treatment is unlikely to be of benefit, should it be considered?

Another moral dimension must be added to the discussion: What role does the common good play? In a time of scarcity, high costs, and unjust distribution of healthcare goods, greater consideration for all members of the human family is required so that wastefulness and consumerism can be eliminated.

When cure or sufficient restoration of health is not possible, the patient and the medical profession should turn their attention to pain management. Attempting one more aggressive treatment, at the suggestion of either the physician or a family member, undermines the meaning of one of the Church's most profound teachings: respect for the dignity of the person. Whatever the motivation, this behavior strikes at the core of patient autonomy. To impose one more invasive or painful treatment on a patient, especially at a time of vulnerability, is to deny that the patient is able to understand his or her life and make a prudent decision.

A physician who is asked to provide a treatment that he or she considers futile is subject to a similar assault. The request strikes at the core of professional integrity, denying the meaning of the physician's education and experience. The demand for futile treatment creates an unnecessary conflict for the physician, whose primary concern is the patient's best interest, grounded in the principle of beneficence.

THE NEED FOR MORAL WISDOM

Reliance on technology makes Americans susceptible to excessive optimism about human abilities, and it distorts the meaning of failure, finitude, and what is tragic in human life. The appro-

priate use of technological advances in medicine requires discernment born of moral wisdom. The use of technology without moral wisdom can destroy the human good it is seeking to serve. Moral wisdom enables us to focus our vision on the God-given purpose of life and to sustain a balance among the breadth of human goods we find so attractive.

Technology is a nettlesome problem for hospitals, since the macro and micro dimensions interface around patient care. What is particularly troublesome is hospitals' inability to control the various ways that technology drives the dynamics of service delivery. Hospital administrators are often placed in uncomfortable positions by the way that medical innovations are introduced to them, and they feel manipulated into distasteful, unpleasant, or compromising relationships.

To solve this dilemma, healthcare institutions can address the systemic questions of injustice, which impinge on them in a variety of ways. It would be foolhardy for one hospital or system alone to try to correct the current system. But several hospitals and systems working together could send clear signals to pharmaceutical and technology companies that systemic injustices are intolerable. The current climate of reform provides a friendly environment for such actions.

In order to help health care professionals strengthen the Catholic presence in health care, a continuing education institute in medical ethics will be presented by:



Saint Louis University Medical Center Center for Health Care Ethics

HEALTH CARE ETHICS IN A PLURALISTIC SOCIETY: THE CATHOLIC PERSPECTIVE May 17-22, 1993

In its fifth year, this one-week institute offers health care professionals an opportunity to study intensively the contemporary ethical issues in health care. While considering the different ethical systems in our pluralistic society, the participants will focus on the principles and conclusions of Catholic theology concerning medicine and health care. This institute will enable participants to:

- Develop capacity to serve on ethics committees
- Follow a personalist method of ethical decision making
- Understand theories underlying contemporary methods of ethical decision making

For further information contact: Donna Troy, Center for Health Care Ethics, 1402 South Grand Boulevard, St. Louis, MO 63104, 314-577-8195

Accepted for continuing education by the American Medical Association, American Nurses Association, and the National Association of Catholic Chaplains.