## FAMILY PRACTICE AND THE HEALTH CARE SYSTEM

# **Ethical Aspects of the Physician Surplus: Implications for Family Practice**

Gerald T. Perkoff, MD Columbia, Missouri

Higher costs, increasing technology, and more physicians are the three predominant influences facing medicine today. These three forces in turn present three groups of ethical issues for physicians: competition and changed fiscal incentives, effects of organized practice on autonomy and confidentiality, and the problems of the interface between primary and consultant physicians. Family physicians must learn to adapt their practices in ethical ways to the rapid changes that are occurring. Thoughtful insight is essential to the process.

Tt is believed by many that medicine is changing more rapidly and to a greater extent today than at any time since the end of World War II (P Elwood, personal communication, September 1984; R Wilbur, personal communication, October 1984). This rapid change is not primarily dependent upon the accelerated increase in scientific knowledge, which continues apace, but upon the social and economic forces that affect the methods of medical practice and the incentives under which physicians work. The kindly family physician of the past, who worked in an office in which the most complex technology was a blood pressure manometer and cuff, who made house calls, and who could affect the course of illness little, if at all, is gone. Instead of one physician serving all the medical care needs of patients, specialists of many different varieties are needed. Practice is replete with complex technologic devices, most of which can function only in special facilities, usually a hospital. Both the numbers of specialists and the complexities of modern technologies and therapies foster the organization of medical care, involving nonphysicians in major policy and management roles in medicine. Added to this mixture is the reality of more and more physicians of all kinds,1 with the result that competition for patient and dollar becomes an everyday activity of physicians and

organizations.<sup>2</sup> Solo practice, even small-group practice, is becoming a thing of the past. Prepayment and the abundance of physicians now combine in efforts at cost control to bring increasingly larger corporate medical care organizations into being. At the same time, public attitudes have shifted from deep faith in physicians, to mistrust of their motives and competence, and to the belief that even now, when physicians can do more for patients than ever before, people are not getting their money's worth.

#### MAJOR CHANGES IN MEDICINE

These changes in medical care have taken place against a complex backdrop from which three major factors stand out as predominant influences in medicine and from which the major ethical issues of today and tomorrow arise: (1) the cost of medical care, (2) the increasing technologic capabilities of medicine, and (3) the great increase in the number of physicians. Each of these areas is reviewed briefly here to set the stage for discussion of some of the important ethical issues themselves.

The increase in the cost of medical care in just the last 15 years is almost unbelievable. In 1970, aggregate national health expenditures came to less than \$70 billion.<sup>3</sup> Many believed then that if medical expenditures ever reached \$100 billion annually, the public would rebel and people would demand immediate and radical changes in medical care. When \$100 billion was passed in 1973 and 1974—only a decade ago—there was little reaction, and the cost of medical care continued to increase dramatically, reaching a level in 1983 of ap-

From the Department of Family and Community Medicine and the Program in Health Care and Human Values, University of Missouri School of Medicine, Columbia, Missouri. Requests for reprints should be addressed to Dr. Gerald T. Perkoff, Department of Family and Community Medicine, University of Missouri–Columbia, NW 514 Medical Sciences, Columbia, MO 65212.

proximately \$370 billion, or over \$1,700 for every person in the United States. 4 Efforts to control these costs began as long ago as the 1960s. Federal commissions began investigating alternative medical care organizations, particularly the Kaiser Health Plan, in an effort to learn how medical care costs might be controlled,5 and over the next two decades several different approaches to the control of medical care costs by means of organization of medical care were tried. 6-10 More recently, attention has been given to increased competition in the medical care market as a means for controlling medical care costs, and efforts are being made to foster competition among institutions and to emphasize efficiency in hospital operation, which is the purpose of placing hospitals under the diagnosis related groups (DRG) system. 11 With this system of payment, hospitals will be paid prospectively for patient care, with payments determined by the primary diagnosis of the patient's problem, not by actual cost of care of a particular patient.

Each of these methods to control the cost of medical care has as one of its basic premises the belief that physicians are responsible for a significant portion of the cost of medical care, both by virtue of their own earnings and because of the control they exert over the diagnostic and therapeutic process. The evidence that this is so is quite compelling. Fuchs and Kramer<sup>12</sup> and Evans<sup>13</sup> showed years ago that the volume of services provided by physicians varied directly with the density of the physician population in different regions of the United States and Canada, respectively. They provided strong evidence that the variations were related directly to physician behavior. More recently, in a series of papers of seminal importance, 14,15 Wennberg and Gittelsohn have shown that physician decision making is the major factor responsible for wide variation in the use of standard surgical procedures to treat people from completely comparable populations. In this work, after controlling for health status, age, sex, economic status, education, access to physicians, physician age and training, and other factors, Wennberg and Gittelsohn demonstrated that the rates at which surgery was performed for various common conditions varied as much as twofold in regions of New England that were no more than 30 miles apart from one another. Hospital characteristics did not account for these differences; they were attributable almost entirely to physician decisions. Thus, any system of medical care organization or change in reimbursement of physicians can expect to have effects upon the costs of medical care primarily by changing the physician incentives, and through those incentives, physicians' decisions about medical care. It is in these expectations that many of the ethical issues of the day

Likewise, the extensive technologic developments in medicine, with their attendant power to effect change in patient status and their great cost, create enormous dilemmas for physicians who must decide

when, to what degree, and for how long to use any set of diagnostic and therapeutic resources. Thus, as an example, the knowledge that coronary care units exist and are available to patients with coronary artery disease brings forth not only the question of whether there is space in the unit for a patient with a myocardial infarction, but also whether the unit is effective. whether another patient might benefit more from its use than the particular patient in question, whether funds are available privately or from public sources to pay for the hospitalization, and whether any limited funds available should be spent for this or some other purpose. In this instance, as in many others that could be cited, doubt exists on all these scores. While coronary care units have been considered beneficial for years, much work suggests that care of patients in such units is procedure intensive and costly, but not necessarily effective. 16-18 Thus, even with this generally accepted form of treatment, the physician must decide whether any potential benefit warrants the expense and risk to the patient. Similar dilemmas come up in everyday practice with regard to the ordering of laboratory tests, 19 x-ray examinations, 20 medical intensive care for patients with pulmonary edema,21 and overall patient care services in hospitals.<sup>22</sup> As complex as these decisions are, they say nothing about the sociomedical dilemmas created by technologic sophistication—such things as genetic manipulation, transplantation, or treatment of Baby Does.

The third major factor that contributes to the backdrop of today's ethically complex medical care scene is the rapidly growing number of physicians. Twenty-five years ago there were only 85 medical schools graduating about 8,000 students<sup>23</sup> per year. Now there are 127 schools graduating almost 16,000 students per year.<sup>24</sup> These numbers and the projections that arise from them led the Graduate Medical Education National Advisory Committee to project major surpluses of physicians in the next decades and have already led to marked alterations in practice patterns. Some of these changes have been evident in local medical care settings, which mirror the broader effects that likely will be seen everywhere.

For example, from 1967 to 1979 personal experience with a randomized controlled trial of prepaid fee-for-service practice, which then was developed into a teaching practice, and then into a free-standing health maintenance organization (HMO), 12 proved that in the early years it was almost impossible to find physicians willing to work in such an organized system, and finding patients to enroll was equally as difficult. To-day, with the proliferation of organized forms of health care, that group is part of a six-plan network seeking to grow from 42,000 to 250,000 enrollees. Physicians now seek employment with it instead of requiring intensive recruitment (L Kahn, personal communication, 1985).

Such changes are typical. The high cost of care and increasing numbers of physicians have led to changes in payment for medical care that foster competition. In

contrast to slow acceptance years ago, prepayment for medical care now is stimulating escalation of organized competitive medical care plans, which recruit physicians from the surplus with great ease. The entire complexion of medical care is changing, and with it new issues of importance also are evolving.

### ETHICAL ISSUES IN A CHANGING HEALTH CARE SYSTEM

In former times the individual physician functioned mainly within the strict confines of the physicianpatient relationship with almost no one to answer to but himself and his patient. His behavior was governed primarily by codes of professional ethics, sets of rules for day-to-day function that had the dual purpose of enjoining him to provide the best in medical care and to protect him and his income from competition and from the intrusion of business into the practice of medicine. 25 He was required to be competent, to treat patients, to save lives, to keep confidential information secret, to know his limitations, not to advertise, not to split fees, and not to own facilities—drug stores, medical equipment sales offices—that might present him with conflicts of interest. The modern physician is governed by the same kind of code, but today that code is almost mute on the issue of advertising, business conflict of interest, or protection from competition.26 Instead, the physician of today must relate to numerous other physicians and must release information to insurance companies and to the government. He cares for patients in circumstances where many people have access to the patient's record in everyday course of care, making maintenance of confidentiality almost impossible. He is permitted to advertise, and he shares responsibility for policy decisions in medical care with lay administrators, corporate officers, and officers of practice organizations. He may own stock in for-profit hospital or HMO corporations. He likewise practices in a technology-rich environment in which he can maintain biological life long after it would have ceased in an earlier, simpler time. He must deal with genetic and reproductive manipulations unheard of even a decade ago, thereby directly influencing both the initiation and cessation of life. As the person legally qualified to carry out medicosurgical procedures, he is the one most intimately involved in the abortion controversy, in the issues that arise when one considers intrauterine surgery for the correction of fetal neurologic defects, in highly controversial, costly surgery that leads to the replacement of hearts, lungs, livers, kidneys, arteries, even to discussions of the surgical implantation of mammalian brain—someday.

Of these major changes, the three following issues directly affect the practice environment and incentives for physicians: (1) competition and the changed fiscal incentives in medicine, (2) effects of organized practice on autonomy and confidentiality, and (3) the prob-

lems of the interface of family physicians with physicians of other specialties.

First, consider competition and changed financial incentives in medicine. Formerly, physicians practiced in an environment of relative manpower scarcity so that, with rare exceptions, competition was not a significant issue in American medicine. Whether in small groups or as solo practitioners, physicians had as much to do as they generally wished; in many instances they found themselves too busy. They could pick and choose among those patients presenting themselves to their offices, so that they built practices that fit their tastes and talents. They charged for their work on a fee-for-service basis, and they could increase the volume of work to achieve levels of income that fit their desires and their lifestyle expectations. While this method led to physicians being among the highest paid professionals in the country, it also is believed to have led to some of the very difficulties faced today. Hospital insurance favored admission to the hospital over ambulatory care, technologic and surgical procedures were rewarded much more than simple office care and counseling, and physicians became accustomed to doing as much as they thought desirable, being paid for each additional bit of diagnostic and therapeutic work they did. It was a piecework method of doing business.

The combination of large numbers of excess physicians, along with efforts to control costs by prepaying for episodes of care rather than paying by visit or admission, reverses this tendency by favoring the development of organized forms of medical care that are in a position to hire salaried physicians, that budget care on an annual basis, and that compete with other such organizations for patient enrollment. Increasingly more plans are being developed based upon prospective prepaid capitation arrangements. In this circumstance, the physician is paid more for doing less, and the fiscal side of medicine is thereby turned around. While this situation seems fraught with possibilities for abuse, most physicians adapt their work style well to such arrangements, using them for improvement of patient care rather than for increasing income. For instance, many physicians have incorporated procedures and methods into their practices that are not of demonstrated value to the patient; the annual complete physician examination is an example. As long as the patients liked the examinations and they were considered to be of value, they were continued. It now is known that such examinations are of little value.27 In a fee-for-service setting it is difficult to change these methods, but in a prepaid setting, resources that formerly went to periodic physical examinations can be diverted to procedures of more value and more clearly associated with the medical needs of the enrolled population.

This same process has a dangerous side. When different organizations are competing for the patients' enrollment dollar, the temptation will be to cut corners

and to limit expensive, but necessary, forms of care so that the group's premiums become more competitive. Such corner-cutting can lead to reduced quality of care in the name of economy, a common practice in other business, but a serious form of neglect in patient care. The only possible way in which the physician can combat this tendency is to work, within himself and with the organization in which he works, to ensure that decisions are made on the basis of the best available medical information, not only on the basis of money. The potential for conflict of interest is great in these circumstances and is manifest in a more visible way in the business practice of advertising, now permitted in medicine. The earlier proscriptions against advertising in the practice of medicine were designed to protect patients from quackery and physicians from competition. Organizations for medical care, however, must display their services so patients will know which ones to choose, an effort that can be done in an honest and tasteful manner. Unscrupulous physicians and organizations, however, can display their services much as discount stores do advertising, with loss leaders, reduced services, and cut corners. Again, the only protection is the physicians' commitment to do only that which is best for the patient.

The second major issue is the effect of organized forms of medical care on the physician-patient relationship. When a patient seeks a physician's help, he or she generally does so with certain implicit assumptions in mind that govern the transactions taking place between them. First and foremost is the expectation that the physician will bring a satisfactory level of professional competence to the relationship, competence that is adequate for the problem at hand. If the physician is not competent, the patient expects the physician to recognize this deficiency and to seek the help of another physician. Basically the patient expects, and in accepting the patient, the physician promises that the physician will use up-to-date professional expertise and sound judgment in the patient's care. This understanding seems straightforward enough and leads physicians to read, to attend conferences, to participate in continuing medical education, and to analyze and learn from their own experience. In this way they can know their own limits and can confidently deal with the patient problems that lie within those limits. When competition is severe and there are so many physicians that one's way of life and one's personal income may appear to be threatened, however, the temptation will be strong to push those limits, to keep patients who should be referred, and to depict oneself as superior to other physicians. If physicians accede to such temptation, they will not only be at odds with their own basic professional code, they also will be doing a social disservice by acting in ways that justifiably lead to public disaffection and mistrust.

This underlying principle of recognition of limits of professional competence applies to all physicians, but it has special and practical meaning for family physi-

cians, whose discipline functions by design at the interface between them and other specialists. This interface often has been characterized by conflict, by argument over what part of medicine "belongs" to one discipline over another, and by anger and hostility. In a period of physician surplus, this interface problem could be even worse than it is now. Family physicians have a special responsibility, therefore, to develop clearer ideas of the content and areas of expertise of their specialty. Considered in light of their competence responsibility to their patients, working toward acceptance of the borders of their discipline by all parties at the interface becomes an ethical responsibility, a solution to the ethical issues that arise out of the patient's expectation of their physician's professional competence and his honest recognition of need for other physicians in the care of the patient.

Another major expectation or characteristic of the physician-patient relationship is that it will be based on trust. Not only do patients trust the physician to know the limits of his or her competence, but they trust the physician to respect the patient's privacy and keep in confidence anything that the patient tells in the course of an episode of care. Trusting the physician makes it possible for the patient to open up, to tell of private matters that may bear on health and illness. The patient gives up personal autonomy to the physician in return for the promise of effective medical care delivered in confidence. Even without a surplus of physicians or a strong move toward the organization of medical care, the rapid growth in the complexity of medicine and the proliferation of large numbers of subspecialty physicians have led to difficulty in maintaining confidentiality.<sup>28</sup> Especially in hospitals, patients are cared for by groups of physicians and other professionals, all of whom have legitimate access to the patient's record and who may breach confidence inadvertently or thoughtlessly.

With the increase in physician numbers and the further organization of medical care into competitive prepayment or insured groups, the organizational requirements for transmission of patient care information, either in the process of care or in the management of quality and cost of care, will grow. Who has a right to this information? Can an employer—who may pay the costs of the medical care in a limited access organization, such as a preferred provider organization (PPO) or an HMO, and who may even have management responsibility for the health plan—have access to and use medical information that might work against patient's continued employment status or prospects for a promotion or a raise? Further, when records of medical financial information are shared within an organization, how will even everyday aspects of the physician-patient interaction be kept secret? Patients need some assurance that someone is working in their behalf to maintain the therapeutically important aspects of confidentiality in the physicianpatient interaction. Generally, it is the physician who

is this responsible person. If, however, the organizational requirements exceed those of the physician-patient relationship, the physician also will give up autonomy. This loss raises a major ethical issue, perhaps the most important one to all physicians; that is, who controls a practice and how does one respond to the probable loss of that control?

The principle of autonomy always has been an important one in medicine. For physicians, autonomy has meaning in almost all aspects of professional life. The physician, for example, has functioned by professional codes that give him the right to accept or not accept patients for care, the right to determine the conditions under which he will or will not practice medicine—solo, group, small town, city, specialist or generalist—and the right to set terms of financial remuneration for his services. With regard to the patient, the physician's belief in his own autonomy often has led to authoritarian, paternalistic behavior that some have held to be intrinsic to and vital for the therapeutic process. With regard to other physicians, particularly those of other specialties, autonomy of action permits the physician to decide when to refer, to whom, and under what terms. It has also permitted the physician to decide for himself the levels of his own competence and to do or not to do procedures, treatments, or studies some might consider the purview of some other specialist. For the family physician this freedom to determine competence and privilege has special meaning, as some view everything a family physician does as part of some other specialty. All these things are changing in the era of physician surplus and increasing organization of medical care.

For example, maintenance of personal professional autonomy in an organized form of medical care may not be so difficult for surgeons or obstetricians. Their work is much the same regardless of the form of their organizational environment. People's surgical needs are the same no matter what the form of payment. In fact, there may be even less temptation to do unnecessary surgical procedures in an organized setting than there may be in the fee-for-service world. Delivering babies, likewise, is little different under different forms of payment for obstetrical care. It is a process that is time limited, natural, and more risky than many recognize, but nevertheless not particularly dependent upon incentives to the physicians involved.

Maintenance of these characteristics of practice, however, becomes much less clear for the bulk of non-surgical physicians, whether they are generalists—internists, pediatricians and family physicians—or subspecialists, such as cardiologists or pulmonary physicians. Here the prevailing philosophy of care has held that it is the physician's responsibility to leave no stone unturned in the pursuit of the diagnosis, no matter how obscure it may be. This philosophy has led to major expenses for testing and examinations that may be of questionable value in the majority of patients and conflicts directly with a philosophy that is parsimoni-

ous in selection of diagnostic pathways and is comfortable with the ambiguity of not knowing every fact.

The physician in fee-for-service practice makes these decisions by whatever means he chooses, usually a combination of beliefs about the value of the items being considered for use in practice along with some conscious or subconscious knowledge of the potential income to be derived from the practice. In an organized setting of care such decisions generally are made at the very least by groups of physicians who may not always agree about the choices made. The physician's decisions are overseen by the management group of the practice, who are concerned about the financial implications for the group. In most instances little interference has been experienced. However, choices may be made about automated laboratories, radiologic services, review of hospitalizations, certain pieces of equipment on the basis of budgetary freedom or constraints, and these decisions themselves may apply limitations on medical care. The modification of a benefit plan to include a major, new, expensive, albeit attractive, surgical operation has significant implications for the other resources available to the group and for its price and marketability. This decision making is a far cry from individual choices made by individual physicians.

The final problem, and one that has the most meaning for family physicians, is another aspect of the "interface problem." Many people do not understand what family practice is. They see family practice only as an effort to take parts of medicine from many specialties and combine them into a mocked-up, newfangled general practice that has no real justification for being. Even without the current changes in medical care, this attitude, and its reciprocal among family physicians, has made competition at the interface of the various specialties a real problem. Obstetric practices are most likely to be questioned, as are family physicians' capabilities in intensive care and orthopedics. An extensive process of documentation of all family practice training experiences attests to these concerns.

In some cities, even in individual institutions, this competitive problem has expanded from disagreement about individual services, procedures, and patients to competition for whole primary care populations. The stated basis for these battles is the question about family practice competence in each of the areas, but the underlying problems are philosophic and economic. Family practice must do an even better job than other specialties in making the proper referrals, documenting experiences, and maintaining competence. This also is a major opportunity.

In a period of physician surplus and increasing individual and organizational competition in medical care, the family physician in fee-for-service practice will have real opportunity to pick the best physician available for his patient. When there is a surplus of too many physicians, poor physicians should lose business

and should no longer be protected by a "good-old boy" network or shielded by a conspiracy of silence. Selection of the best physician will solve this problem. Other aspects of physician surplus, organizational growth, and competitive medical care, however, will work in direct opposition to selection by quality. Physicians and medical care organizations will compete for patients and money. The economic health of the organization will dictate referral to "our own" rather than "the other" physicians. If major differences in competence exist in any given organization—as well they might—the ethical issue of competence will face the conflict of economics. In the future, therefore, responsibility for competence will extend beyond the individual physician himself to others with whom he works. The patient's welfare may at times require opposition to and breaking the rules of the very organization upon which one's economic health depends. One can hardly imagine a more difficult personal set of dilemmas to resolve.

This summary of the ethical aspects of the new era of physician surplus leads to only one conclusion. Honorable physician behavior continues to rest upon the principles of the individual physician and upon how each physician under those principles adapts his practice to the rapid changes that are occurring. It should still be possible to practice medicine ethically, to participate in the excitement and change all physicians face. Nostalgia for old times will not solve today's problems. Thoughtful insight into the problems of the new incentives, however, gives family physicians a good chance to do so as individual physicians and people. The next several years should be an interesting period in which to live and work.

#### References

- Report of the Graduate Medical Education National Advisory Committee to the Secretary of the Department of Health and Human Services. Vol 1: GMENAC Summary Report. Health Resources Administration (Hyattsville, Md): DHHS publication No. 81-651. Government Printing Office, 1980
- Hutler DO: Access to care and the evolution of corporate for-profit medicine. N Engl J Med 1984; 311:917-919
- Altman SH, Eickenholz J: Inflation in the health industry— Causes and cures. In Zubkoff M (ed): Health: A Victim or Cause of Inflation? Prodist, NY, 1976, p 8
- Freeland MS, Schendler CE: Health spending in the 1980's: Integration of clinical practice patterns with management. Health Care Financing Rev 1984; 5:1
- The Kaiser Foundation Medical Care Program. In Report of the National Advisory Commission on Health Manpower. Government Printing Office, 1967, vol II, appendix IV, pp 197-228
- Perott GS, Chase JS: The federal employees health benefits program. Sixth term of coverage and utilization. Group Health & Welfare News (suppl) October, 1968; 9(10):1

- Klarman HE: Approaches to moderating the increase in medical care costs. Med Care 1969; 7:175-190
- Newman HF: The impact of medicare on group practice prepayment plans. Am J Public Health 1969; 59:629-634
- Roemer MI, Hetherington RW, Hopkins CE, et al: Health Insurance Effects: Services, Expenditures and Attitudes under Three Types of Plans. Ann Arbor, Mich, The University of Michigan Bureau of Public Health Economics, Research Services No. 16, School of Public Health, 1972
- Perkoff GT, Kahn L, Haas PJ: The effects of an experimental prepaid group practice on medical care utilization and cost. Med Care 1976; 14:432-449
- Igelhart JK: The new era of prospective payment for hospitals. N Engl J Med 1982; 307:1288-1292
- Fuchs V, Kramer MJ: Determinants of Expenditures of Physicians Services in the United States 1948-1968. New York, NBER occasional paper 117. Washington, DC, National Center for Health Services Research and Development, December 1972
- Evans RG: Supplier induced demand. Some empirical evidence and implications. In Marle Perlman (ed): The Economics of Health and Medical Care. London, MacMillan, 1974, pp 162-173
- 14. Wennberg J, Gittelsohn A: Small area variations in health care delivery. Science 1973; 182:1102
- McPherson K, Wennberg JE, Hovind OB, Clifford P: Small area variations in the use of common surgical procedures: An international comparison of New England, England, and Norway. N Engl J Med 1982; 307:1310-1314
- Martin SP, Donaldson MC, London DE, et al: Inputs into coronary care during 30 years: A cost effectiveness study. Ann Intern Med 1974; 81:289-293
- Mather HG, Pearson NG, Read KLO, et al: Acute myocardial infarction: Home and hospital treatment. Br Med J 1971; 3:334-338
- Harpur JE, Conner WT, Hamilton M, et al: Controlled trial of early mobilization and discharge from hospital in uncomplicated myocardial infarction. Lancet 1971; 2:1331-1336
- Griner PF, Glaser RJ: Misuse of laboratory tests and diagnostic procedures. N Engl J Med 1982; 307:1336-1339
- Heilman RS: What's wrong with radiology? N Engl J Med 1982; 306:477-479
- 21. Griner PF: Treatment of acute pulmonary edema: Conventional or intensive care? Ann Intern Med 1972; 77:501-506
- Myers LP, Schroeder SA: Physician use of services for the hospitalized patient: A review of implications for cost containment. Milbank Mem Fund Q 1981; 59:481-507
- Council on Medical Education: Medical education in the United States. JAMA 1968; 206:1987-1993
- 24. Association of American Medical Colleges: Physicians for the twenty-first century: Report of the project panel on the general professional education of the physician and college preparation for medicine. J Med Educ 1984; 59(11)(part 2):1-200
- 25. American Medical Association: Code of medical ethics. In Reiser SJ, Dyck AS, Curran WJ, et al (eds): Ethics in Medicine: Historical Perspectives and Contemporary Concerns. Cambridge, Mass, MIT Press, 1977, chapt 8, pp 26-34
- American Medical Association: Principles of medical ethics.
  1957 & 1971. In Reiser SJ, Dyck AS, Curran WJ, et al (eds): Ethics in Medicine: Historical Perspectives and Contemporary Concerns. MIT Press, Cambridge, Mass, 1977, chapt 11. pp 37-38
- Medical Practice Committee, American College of Physicians: Periodic health examinations: A guide for designing individualized preventive health care in the asymptomatic patient. Ann Intern Med 1981; 95:729-732
- Siegler M: Confidentiality in medicine—A decrepit concept. N Engl J Med 1982; 307:1518-1521