
Professional Outlook and Behavior

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The general acceptance by health care professionals of the obligations inherent in a process of mutual participation and shared decisionmaking is intimately tied to their attitudes toward their patients and colleagues. Such attitudes are formed over many years and are more subject to gradual evolution than to rapid change of the sort that can follow a scientific breakthrough. Individual attitudes are shaped by role models, prevailing social currents and attitudes, professional education, socialization, practice styles, and the other life experiences of the individual.

The “professional dominance” view of the physician-patient relationship¹ is deeply rooted in the history of the medical profession and is continued by the process of medical education and socialization into the professional role. Other health care professionals, as a group, have different attitudes than physicians on certain points, although all health care professionals have certain attitudes in common.²

If the objectives of increased communication and shared decisionmaking are to take root in health care, some reorientation of attitudes will be required. Accordingly, two possible means of influencing professional attitudes are discussed in this part of the Report: decisions about which individuals are admitted into the health care professions, and the content (both explicit and implicit) of professional training. The importance of both selection criteria and content of training has long been recognized. Indeed, the changes in medical education following the famous Flexner report in 1910 included not only the increased orientation toward empirical science,

¹ See, e.g., Eliot Freidson, *PROFESSIONAL DOMINANCE: THE SOCIAL STRUCTURE OF MEDICAL CARE*, Aldine Pub. Co., Chicago (1970) at 127-66.

² *Id.* at 20-22.

complex technology, and a biochemical and physical explanation of human life, but also the selection of students adept in these fields. Yet Flexner recognized that such developments were but a necessary stage, not the end point, when he said:

The reconstruction of our medical education...is not going to end matters once and for all. It leaves untouched certain outlying problems that will all the more surely come into focus when the professional training of the physician is once securely established on a scientific basis. At that moment the social role of the physician will generally expand, and to support such expansion, he will crave a more liberal disinterested educational experience.³

Thus, one direction for policy is to encourage the recruitment and selection into professional schools of individuals committed to, and likely to be skilled deliverers of, humane care, with respect for patients and their values. A second path would involve reinforcing those elements of professional education and socialization that are conducive to the development of the desired attitudes and to modify other elements that may be destructive.

The Commission is convinced that neither path is sufficient in itself. Efforts to recruit caring and humane individuals into professional schools are unlikely to be fully successful if the educational regimen is not conducive to these values. Collaterally, given the current realities of professional training, it is unlikely that any reform efforts that might be adopted would be able to transform the attitudes or reshape the behaviors of existing professionals. Thus, although the obstacles present on each path are recognized, the Commission is inclined to recommend movement along both.

Selection Criteria for Medical School

Some observers have argued that the quickest and most effective way to turn out doctors of broadly humane sympathies who are both committed to and skilled in communicating with patients is to admit to medical school more people likely to have such characteristics.⁴ While this strategy is appealing in theory, there is little evidence that such individuals can be readily identified, much less that the characteristics of people

³ Abraham Flexner, *MEDICAL EDUCATION IN THE UNITED STATES AND CANADA: A REPORT TO THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING*, Bulletin No.4, Carnegie Foundation, New York (1910).

⁴ For a review of this argument and relevant data, see Caroline L. Kaufmann, *Medical Education and Physician-Patient Communication*, Appendix I, in Volume Three of this Report.

admitted to medical school are translated into their traits when they become physicians relating to patients.

Current Standards. Admission to medical school is a highly competitive process designed to select students who are academically gifted and strongly committed to a career in medicine. Yet a number of critics of medical education have suggested that the selection process encourages applicants who are *least* likely to espouse a humanitarian view of the medical enterprise—individuals who are tough, competitive, single-minded, and narrowly focused in the “hard” biological sciences.⁵

Although most medical schools require premedical training in such fields as biology and chemistry, few require humanities or social and behavioral science courses.⁶ Less than 8% of those who entered medical school in 1979-80 majored in these fields as undergraduates.⁷ Thus it may be that the undergraduate experiences of most successful applicants are deficient in the exposure to the social sciences and humanities that could help sensitize them to the concepts and skills essential to becoming effective and responsive communicators.⁸ Moreover, it appears that nonscience majors are ultimately less likely than science majors to choose careers in primary care in which continuing communication with patients is most necessary.⁹

Other medical educators have challenged the contention that medical students lack sufficient undergraduate training in the humanities and social sciences,¹⁰ and have argued that the

5 See, e.g., Samuel Gorovitz, *DOCTORS' DILEMMAS: MORAL CONFLICT AND MEDICAL CARE*, Macmillan Publishing Co., New York (1982) at 206-07; Edward D. Pellegrino, *Pruning an Old Root: Premedical Science and Medical School*, 243 J.A.M.A. 2518 (1980).

6 For the 1982-83 entering classes at the 126 medical schools in the United States, 14 (11%) required undergraduate courses in the humanities, 11 (9%) required behavioral science, and 10 (8%) required social science. See *Medical School Admission Requirements 1982-3*, 32nd ed., Assoc. of Amer. Med. Colleges, Washington, D.C. (1981) at 8.

7 Although relatively few people from these fields applied, they were accepted in similar proportions to those from the biological sciences. Therefore, it is not clear whether such applicants are discouraged from applying in the first place or whether college students who plan to apply to medical schools dare not pursue “irrelevant” majors. *Id.* at 9.

8 P. Pioreschi, *Medical Education, Irrelevancy and the Humanities*, 6 MED. HYPOTHESIS 509 (1980).

9 Testimony of Richard Moy, transcript of 19th meeting of the President's Commission (April 3, 1982) at 195-207.

10 R.G. Niemi and J.E. Phillips, *On Nonscience Premedical Education: Surprising Evidence and a Call for Clarification*, 55 J. OF MED. EDUC. 194 (1980).

almost exclusive focus on the sciences is needed for good performance in medical school.¹¹ There is some evidence, however, that students with undergraduate majors in the humanities and social sciences actually score higher than science majors in some basic science courses in medical school and on the Behavioral Science subtest of the National Board Medical Examination.¹²

Changes in Criteria and Process. In spite of this controversy over suitable characteristics of people admitted to medical school, a number of suggestions for changes in selection criteria have been made. One approach is to discount somewhat the current emphasis on undergraduate success in the hard sciences in favor of applicants with broader exposure to the humanities and social sciences or with personal experience in “helping” capacities.¹³ A second approach favors individual assessments, either through interviews or psychological tests, of an applicant’s predisposition toward humane service.¹⁴

11 See, e.g., Travis L. Gordon and Davis G. Johnson, *Study of U.S. Medical School Applicants*, 1976-77, 53 J. OF MED. EDUC. 873 (1978) and Travis L. Gordon, *Study of U.S. Medical School Applicants*, 1977-78, 54 J. OF MED. EDUC. 677 (1979).

12 R.L. Dickman *et al.*, *Medical Students from Natural Science and Nonscience Undergraduate Backgrounds*, 243 J.A.M.A. 2506 (1980).

13 See, e.g., Gorovitz, *supra* note 5, at 205-07.

14 Assessment of personal qualities of medical school applicants is done through letters of reference, interviews, and increasingly by various other “noncognitive” tests. Letters of reference generally do not discriminate well among applicants. See, e.g., Arthur S. Elstein and Howard S. Teitelbaum, *A Systematic Evaluation of an Admissions Process*, PROCEEDINGS OF THE CONFERENCE ON RESEARCH IN MEDICAL EDUCATION, Assoc. of Amer. Med. Colleges, Washington, D.C. (1974) at 207. Interviews are too costly to be used with every applicant and are considered by some to be too subjective and perhaps deceptive. See, e.g., John B. Molidor *et al.*, *Assessment of Problem-Solving Skills as a Screen for Medical School Admissions*, PROCEEDINGS OF THE CONFERENCE ON RESEARCH IN MEDICAL EDUCATION, Assoc. of Amer. Med. Colleges, Washington, D.C. (1978) at 119. Numerous measures of personality, attitudes, anxiety, depression, etc. have been used as adjuncts to the MCAT and undergraduate grade point average to assist in selecting medical students. As of 1972, almost half the medical schools in the U.S. and Canada were using at least one noncognitive test in their admissions process. A. D’Costa and A. Schafer, *Results of a Survey of Non-Cognitive Tests Used in Medical Schools*, Assoc. of Amer. Med. Colleges, Washington, D.C. (1972). The authors of an extensive review of such measures concluded: “1) that personality traits, as measured by structured tests, are of at least equal importance with cognitive qualities in predicting medical school performance; and 2) that structured personality tests are less time consuming and costly than most other techniques for measuring personality traits and are therefore more feasible for the admissions process.” J.M. Cuca, L.A. Sakakeeny, and D.G. Johnson, *The Medical School Admissions Process: A Review of the Literature*,

Although neither approach is likely to revolutionize patterns of communication and decisionmaking in patient-provider relationships, further research and experience would be needed to determine what role they might together play in fostering changes in these directions when combined with changes in the style and content of medical education.

Even if changes in selection criteria were likely to produce the desired results, it is unclear whether such changes could be implemented. In response to criticism of the Medical College Admission Test (MCAT) for its exclusive emphasis on cognitive skills,¹⁵ the Association of American Medical Colleges (AAMC) expended considerable effort between 1971 and 1976 trying to devise measures of noncognitive qualities thought to be important to applicants' overall sensitivity as physicians. Compassion, coping capability, decisionmaking ability, inter-professional relations, realistic self-appraisal, sensitivity in personal relations, and "staying power" were thought to be the most important qualities to assess. Ultimately, the AAMC decided it was not possible to devise valid measures of these qualities in a multiple-choice format for a national admissions test and concluded instead that such assessments are best made by admissions interviewers (and later by clinical instructors). The Commission commends the subsequent efforts of the AAMC to help the professors in 500 departments in the medical schools improve methods to assess the personal qualities of students.¹⁶

A third suggestion for changes in admission criteria is that a "quick fix" might be achieved by admitting larger numbers of applicants belonging to groups traditionally associated with nurturing or caring roles (notably women) or with characteristics thought likely to improve sensitivity toward the concerns of minority groups and with the ability to communicate with patients "in their own language" (blacks, Hispanics, and members of other minority groups),¹⁷ The basis of such an

1955-76, Assoc. of Amer. Med. Colleges, Washington, D.C. (1976). It should be noted that in most cases the utility of these measures is being examined in relation to school performance, not in relation to the nontechnical aspects of patient care.

15 The MCAT is designed to assess students' abilities in four major areas: science knowledge, problem-solving, reading skills, and quantitative analysis.

16 Testimony of August Swanson, transcript of the 19th meeting of the President's Commission (April 3, 1982) at 114-18.

17 Recent analyses of application and enrollment in U.S. medical schools over roughly ten years have shown that women and ethnic minorities, historically underrepresented in the medical profession, have been admitted to medical school in increasing numbers in an effort to increase equity of access. Application and enrollment figures show a 27% increase in total female enrollment from 1974 to 1980. Women made up 27.8% of the 1979-80 first-year medical school class.

approach is the idea that social class, gender, and ethnic background are stronger determinants of attitudes and behavior among medical students than the training and professional socialization they receive in their formal academic careers.

Although some differences do occur in the admissions tests of women, racial/ethnic minorities, and the middle-class white males who are the predominant group of applicants, there is little evidence of persistent differences in attitudes or orientations in medical school. In fact, there seems to be a convergence of attitudes and orientations as students progress through medical school, thereby resulting in relative homogeneity. In terms of ultimate career patterns and responsiveness to patients, there is also increasing evidence of convergence between males and females.¹⁸

Combined Degrees and Early Admission. As discussed above, competition for admission to medical school often has the unfortunate consequence of narrowing the range of courses students feel free to take at the undergraduate level, thereby limiting exposure to disciplines other than science and leading to intense competition during college. Some limited attempts have been made to overcome these shortcomings at the premedical level by admitting students to medical school earlier. The Commonwealth Fund's "Interface Program" in seven schools is the most noteworthy example. Although the program varies somewhat, typically college and medical school are completed in six or seven years rather than eight. Students are accepted into the program after their sophomore year of college, thereby alleviating much of the pressure typifying the premedical experience and enabling more students to pursue serious studies in the liberal arts rather than in a narrow "premed" curriculum. In addition, such programs allow for better integration of the undergraduate and medical school curricula. In some schools this reduces the redundancy of science courses (covered both in undergraduate education and in first-year medical school), permitting students in their first year of medical school to select courses in clinical medicine and the social and behavioral sciences. Although there is some concern that, once admitted to such a program, students may stop studying and may ultimately fail in medical school, two evaluations concluded that these programs alleviated competition and stress at both the undergraduate and medical school

Enrollment by racial and ethnic minorities (including blacks, American Indians, Mexican Americans, and mainland Puerto Ricans but excluding Asian Americans) constitutes 8% of the total medical school enrollment (up from 2.8% in 1970, but short of the 12% goal recommended by the AAMC). In short, the gender, racial, and ethnic characteristics of medical students are becoming slightly less dominated by white, middle-class males. See Assoc. of Amer. Med. Colleges, *supra* note 6, at 21-24.

18 This evidence is reviewed in Kaufmann, *supra* note 4.

levels, eased the transition between the two, and encouraged students to pursue a broader array of courses.¹⁹

Innovations in Medical Education

The Commission recognizes that the first priority in training physicians must be to impart skills needed to use the ever-expanding body of biomedical knowledge and techniques. In addition, it is aware that medicine is a diverse profession with primary care practitioners, specialists, subspecialists, and researchers, and that the relative need of these professionals for technical and interpersonal skills will vary. Consequently, the educational goals at different institutions and in different programs will differ.

Nevertheless, medicine is a “helping profession,” the primary purpose of which is to serve the needs of patients. Few would suppose that people who pursue careers in medicine are uninterested in its human elements. And yet the education process often discourages the development of caring attitudes by focusing so much attention on technical competence and by failing to nurture (or, in some cases, even denigrating) the development of the compassion and caring necessary to the practice of good medicine.²⁰ If physicians have an obligation to provide patients with a basis for effective communication and decisionmaking, they must learn to value this goal and acquire skills relevant to it.

Training students to practice as humane and caring physicians with an interest in serving rather than dominating patients is both an explicit and implicit process. Explicitly, students may be taught concepts and skills in the classroom or at the bedside. Implicitly, attitudes and values are learned from role models and reward systems. If certain practices and precepts are preached in formal course work, but subsequently students neither observe them in their role models nor are specifically rewarded for practicing them, they will quickly learn that such concepts and behaviors are in fact not highly valued.²¹ Therefore, in assessing medical education it is

19 Alfred Gellhorn, *An Evaluative Report of the Interface Programs Supported by the Commonwealth Fund*, mimeo. (1980); Janet T. Pozen, Allen R. Meyers, and Kathleen Scharf, *Boston University MMEDIC Program Phase I Final Evaluation Report*, mimeo (1980).

20 See, e.g., Harold I. Lief and Renée C. Fox, *Training for Detached Concern in Medical Students*, in H. Lief, V. Lief, and N. Lief, eds., *THE PSYCHOLOGICAL BASIS OF MEDICAL PRACTICE*, Harper and Row, New York (1963) at 12.

21 Indeed there is reason to believe that the values underlying informed consent are not deeply rooted in medical practice or tradition. In his perceptive study of the training of young surgeons, sociologist Charles Bosk notes regretfully that he had to “bracket” the issue of informed consent in his field research in order to enter the everyday world of surgeons. As Bosk explains:

important to look beyond formal course requirements to the broader structure and climate in which students learn.

Frequently Cited Problems. Medical educators, students, and the public have become increasingly critical of medical education. Professional and popular journals abound with articles pointing out the defects in medical education and suggesting ways to correct them.

The traditional medical school curriculum is divided into two years of preclinical course work followed by two years of clinical rotations through various medical and surgical specialties. This division has often been criticized for being unnecessarily sharp and counterproductive.²² The basic sciences may seem irrelevant when presented outside the patient care context. The transition from preclinical to clinical work is abrupt and stressful, and once in clinical rotations there may be little opportunity to digress into nonclinical areas or to apply behavioral science concepts to the clinical aspects of patient care.

In addition, several other factors are commonly cited as contributing to a general climate that hinders the development of attitudes necessary for the humane practice of medicine. First, the explosion in medical technology has resulted in a massive and rapidly expanding body of facts that must be assimilated by students. Although an individual cannot know

I suspended judgment and bracketed the question because I was interested in surgeons' understandings of their social control responsibilities and in their definitions of error and failure. Whether the demands of "informed consent" were met or not was not a matter that surgeons considered a matter for social control. The quality of the consent obtained is not an issue that excites surgeons or affects their evaluations of each other.

Charles L. Bosk, FORGIVE AND REMEMBER: MANAGING MEDICAL FAILURE, Univ. of Chicago Press, Chicago (1979) at 218 n.5. Bosk characterizes that as "a sad commentary." *Id.*

The reasons for this phenomenon are explored and documented in the writings of Jay Katz; see, e.g., *Disclosure and Consent: In Search of Their Roots*, in Aubrey Milunsky and George J. Annas, eds., GENETICS AND THE LAW II, Plenum Press, New York (1980); *Disclosure and Consent in Psychiatric Practice: Mission Impossible?*, in Charles K. Hofling, ed., LAW AND ETHICS IN THE PRACTICE OF PSYCHIATRY, Brunner/Mazel, Inc., New York (1980); *Informed Consent—A Fairy Tale?: Law's Vision*, 39 U. PITT. L. REV. 137 (1977). If Katz and Bosk are correct, the task of creating role models and transforming medical education in a fashion conducive to fostering the Commission's vision of informed consent is daunting in scope and likely to be slow in execution.

²² For a detailed discussion of this topic, see Ruth Oratz, *Achieving Aesthetic Distance: Education for an Effective Doctor-Patient Relationship*, Appendix J, in Volume Three of this Report.

everything there is to know about medicine, medical schools typically place tremendous emphasis on the memorization of facts. Although there is clearly a need to know a great deal of factual information, many critics contend that students spend too much time memorizing and not enough time learning problem-solving and observation skills.²³ Especially during the first two years of medical school, intellectual thought may be stifled because the expectation (as reflected in examinations) is that students should simply memorize and regurgitate facts rather than learn to apply information and concepts to solving problems.²⁴

Second, many physicians and medical educators have noted that students spend relatively little time learning medicine at the bedside with “wise old doctors.” Instead, their role models typically are students and house officers with not much more experience than the students have. The subtle influences that senior, experienced role models can have in conveying attitudes toward patients is illustrated in this account of a third-year medical student’s first exposure to patient care during his surgical “clerkship” at University Hospital in New York. One afternoon Aaron Kenigsberg and several of his classmates had ward rounds with Dr. Frank C. Spencer, chair of the department of surgery, “an Olympian figure to students and residents,” according to the writer, who observed Aaron’s training over a number of weeks.

When Dr. Spencer finally arrived, he turned out to be an amiable, soft-spoken man with a great economy of gesture. He was not at all distant with the students, but he was a gentleman in the old sense of the word and so

²³ There are numerous articles in professional journals such as *J.A.M.A.*, the *New England Journal of Medicine*, and the *Journal of Medical Education* and in the general press on this subject and numerous proposals to streamline and make more rational the factual information that must be learned. Since the Flexner report to the Carnegie Foundation several other national commissions and committees have looked broadly at medical education and have recommended reforms. Dr. Carleton Chapman recently proposed that another national commission be established to reform medical education because it “is intellectually deficient, wasteful of money and time, and in urgent need of overhaul”(quoted in Lawrence K. Altman, *The Doctor’s World: Med Schools Under Attack*, NEW YORK TIMES C4 (June 22, 1982). The Institute of Medicine and the Association of American Medical Colleges are in the planning stages of major studies of reforms in medical education. Dr. Daniel Tosteson, Dean of Howard Medical School, has called for major changes in medical education and has proposed experimental initiation of a radically new program as early as 1983.

²⁴ See, e.g., Oliver Cope, *The Endicott House Conference on Medical Education* in John H. Knowles, ed., *VIEWS OF MEDICAL EDUCATION AND MEDICAL CARE*, Harvard Univ. Press, Cambridge, Mass. (1968) at 157-58.

expected a certain civility of discourse, which students and residents apparently mistook for remoteness....

He saw his patients whole, rather than as collections of symptoms, and tried to help them see their illnesses in perspective, not as the one thing that should dominate their lives.

Perhaps most significantly, he translated the jargon of his profession into simple English. One patient, as a result of an infection, had developed a sheath of scar tissue around the heart. Dr. Spencer explained that the sheath had to be peeled away, as one would peel an orange, so the heart could expand and contract freely. The most striking thing Dr. Spencer did during rounds was kneel next to the bed of one patient who was in very bad shape, so that he could talk to him with their heads on the same level. The man would not have to stare up, as though gazing into the heavens. This may have been the single most generous act Aaron had seen—and would see—during his clerkships; and one that went unremarked.²⁵

Moreover, due to the large number of medical students, limited faculty, and the need for clinical training to occur in small groups, medical schools typically draw a substantial proportion of their clinical teachers from the surrounding community.²⁶ Control over what such part-time faculty teach, how it is taught, and the coherence and consistency of the material may be limited. It is particularly difficult to monitor or control the attitudes and implicit values projected by this diverse, numerous, adjunct faculty to ensure that they foster the desired attitudinal changes.

A third problem derives from the fact that typically each health profession carries out its own educational program in isolation from the others. Thus although doctors and nurses eventually practice together, they are rarely trained explicitly to collaborate.²⁷ As the role of nurses has expanded to include substantial portions of what was traditionally the exclusive domain of medicine, there is an increased need to clarify and coordinate the roles of the two professions.²⁸ Nowhere is this need greater than in communications with patients to ensure

25 David Black, *The Making of a Doctor*, NEW YORK TIMES MAGAZINE 20, 59 (May 23, 1982).

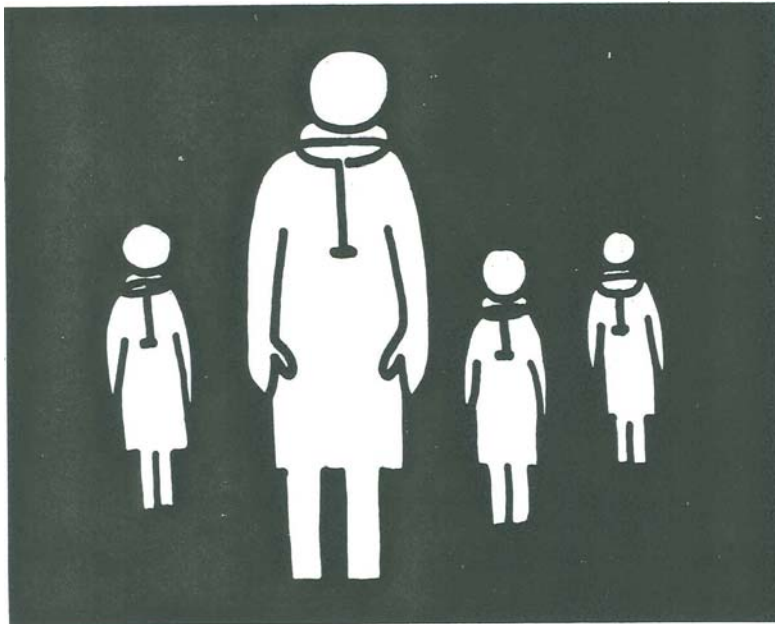
26 Leighton E. Cluff, *Medical Schools, Clinical Faculty, and Community Physicians*, 247 J.A.M.A. 200, 202 (1982).

27 See, e.g., Marian Osterweis et al., *HMO Development for Primary Care Team Teaching of Medical and Nursing Students*, 55 J. OF MED. EDUC. 743 (1980).

28 See, e.g., D.C. Baldwin and M.A. Baldwin, *Interdisciplinary Education and Health Team Training*, in Andrew D. Hunt and Lewis E. Weeks, eds., *MEDICAL EDUCATION SINCE 1960*, Mich. St. Univ. Found., Lansing, Mich. (1979) at 175.

they receive the information they need to make health care decisions.

Finally, concern has been voiced about a disproportionate amount of physicians' training taking place in university hospitals.²⁹ The principal criticism is that these highly specialized, sophisticated, technological centers prepare doctors poorly for the day-to-day practice of medicine elsewhere. Of particular concern to the issues in this Report are the relative lack of opportunity to have patients participate in their own care and the lack of opportunity and responsibility for long-term follow-up care.



These are but some of the concrete criticisms of medical education. Each has important implications for the particular elements of physician training that are of greatest concern here, namely the structuring of underlying values and attitudes conducive to the goals of effective patient participation in health care decisionmaking.

Curricular Innovations. Numerous innovations and experiments in medical education have been designed to address these issues. These include course offerings in the behavioral sciences and humanities, increased exposure to outpatient medical care, faculty development, alterations in grading systems designed to reduce competition (for example, the pass-fail grading now used by most schools), the restructuring and reordering of curricula to integrate the basic sciences with

²⁹ See, e.g., Cluff, *supra* note 26.

patient care, and some limited efforts at combined training of medical and nursing students. Innovations such as these have been introduced in traditional medical schools, in combined six- or seven-year college and medical school programs, and in the new community-based medical schools, where the entire curriculum has often been designed to foster a changed outlook on health care.³⁰

The teaching of social and behavioral sciences in medical schools began in the mid-1950s in an attempt to educate physicians about a variety of influences on patient behavior and to train them to assess patient needs.³¹ The social sciences tended to be taught in classrooms during the preclinical years; hence, students often found it difficult to appreciate their relevance to medical care. Moreover, the material taught by social scientists was typically not reinforced during clinical training and suffered from a lack of integration with the rest of the curriculum.³² By the 1970s the programs were beginning to decline, having never overcome some people's initial "romantic overenthusiasm" or others' "skeptical noninvolvement."³³

About this time, a new movement began in medical education—teaching humanities with a focus on the human values underlying the physician-patient relationship and medical practice. With this came courses in medical ethics, aimed initially at value questions that were being highlighted by rapid technological developments, by shifts in medical care delivery, and by the renewed interest of moral philosophers and lawyers in issues such as those examined in this Report.³⁴ Unlike the earlier social science movement, this human values movement has been aware since its inception of the need to collaborate with other departments, to educate faculty as well as students, and to integrate its teaching with students' clinical assignments.³⁵

30 See, e.g., Hunt and Weeks, *supra* note 28; Gellhorn, *supra* note 19.

31 See, e.g., Patricia L. Kendall and George G. Reader, *Contributions of Sociology to Medicine*, in Howard E. Freeman, Sol Levine, and Leo G. Reeder, eds., *HANDBOOK OF MEDICAL SOCIOLOGY*, 3rd ed. (1979) at 1-22.

32 See, e.g., Evan G. Pattishall, *The Relevance of Behavioral Science for the Training of Physicians*, Presented at Third International Conference on Social Science and Medicine, Elsinore, Denmark (August 14, 1972).

33 Edmund Pellegrino, "Foreword," in William R. Rogers and David Barnard, eds., *NOURISHING THE HUMANISTIC IN MEDICINE: INTERACTIONS WITH THE SOCIAL SCIENCES*, Univ. of Pittsburgh Press (1979) at xii.

34 Programs on human values increased from 11 in 1972 to 65 in 1981. Thus approximately half the medical schools in the United States have such programs, which vary tremendously in size, scope, and structure. Some are separate departments, while others may have a single professor located in a traditional medical school department; some offer only a required lecture or two while others offer entire courses that may be required or electives.

35 See, e.g., Rogers and Barnard, *supra* note 33.

Despite impressive modifications of the curricula, most courses in the behavioral sciences and humanities are offered primarily as electives (see Table 4). The students who take them are therefore self-selected and already aware of the importance of the subject.

Table 4:
**Selected Elective Courses Offered in Medical Schools,
1977-78 and 1981-82**

Elective	1977-78	1981-82
	(N =119)	(N=126)
Biomedical Engineering	42 (35.3%)	46 (36.5%)
Community Medicine	93 (78.2%)	113 (89.7%)
Cost Containment	*	12 (9.5%)
Death and Dying	*	23 (18.2%)
Ethical Problems in Medicine	71 (59.7%)	88 (69.8%)
Health Care Delivery	80 (67.2%)	83 (65.8%)
Medical Jurisprudence	49 (41.2%)	54 (42.9%)
Patient Education	15 (12.6%)	20 (15.9%)

* Not asked in 1977-78.

Source: AAMC: 1981-82 Curriculum Directory.

Half the physicians in the Commission's survey had received "some formal training" in medical ethics while in medical school; 36%, some training in medical law; and 54%, some formal training in physician-patient communications. The exact meaning of "some formal training" is unclear in light of the Medical Student Graduation Questionnaire Survey conducted by the AAMC in 1981, in which only 5% of the 10,795 students questioned reported having taken actual courses in ethical problems in medicine, and less than 3% reported courses in medical jurisprudence and in the behavioral and social sciences.³⁶ When graduates were asked to assess the adequacy of the time spent in such areas as patient-interviewing skills, management of patients' socioeconomic, educational, and emotional problems, and teamwork with other health professionals, sizable proportions of them felt that too little time had been devoted to each of these topics (see Table 5). Thus it appears that relatively few recent medical graduates have been exposed to these curricular innovations and that many find their training inadequate in a number of areas relevant to informed consent.

³⁶ Results of 1981 Medical Student Graduation Questionnaire Survey, Assoc. of Amer. Med. Colleges, Washington, D.C.

Table 5:**Graduates' Reports on Adequacy of Time Devoted to Instruction in Selected Topics During Medical School**

Topic	Adequacy of Time (in percent)		
	Excessive	Adequate	Inadequate
Behavioral Sciences	14%	64%	22%
Patient-Interviewing Skills	6%	79%	15%
Management of Patients' Socioeconomic, Educational, and Emotional Problems	4%	49%	47%
Teamwork with Health Professionals	4%	75%	21%

Source: Derived from AAMC 1981 Medical Student Graduation Questionnaire Survey.

Unfortunately, very little is known about the effects of these courses upon the attitudes and behaviors of even the self-selected fraction of medical students who take them. Standard examinations and evaluations by students of their professors and courses only indicate what has been learned and liked, not whether attitudes and behaviors towards patient care have been affected. Unlike clinical techniques, which can be directly observed and assessed, the ultimate effects of these teachings in the behavioral sciences have eluded direct study.³⁷ Ideally such effects would be assessed over time, but such an evaluation would be compromised by uncontrolled and perhaps unidentifiable intervening variables. Compensating for the self-selection in such courses initially would involve undesirable interventions (that is, by artificially controlling admission to certain courses in the behavioral sciences and the humanities). Finally, development of valid and reliable mea-

³⁷ In the Commission's survey some significant differences were found between physicians who had some formal training in ethics, law, and doctor-patient communication and those who had not. Physicians with such training (especially in communication) were significantly more likely than those without it to view patient participation in decisionmaking positively. They were also more likely to report that they obtained consent from patients before proceeding with a variety of treatments. However, in terms of information disclosure, physicians with formal training in ethics, law, and communication were somewhat less likely to report that they routinely disclosed most items of information. Although this seems to contradict the other findings, these physicians were possibly reflecting more carefully on the disclosure questions because of their training and were giving more honest answers.

tures of the empathic qualities that the courses would be seeking to affect would be extremely difficult.

Although the impact of particular courses should be assessed, physicians' attitudes and behaviors are ultimately determined by the totality of the educational experience and not by any single course. Therefore support for the values and skills that students are exposed to in such courses must come from the entire structure of medical education if these courses are to have the desired effect.³⁸

The Commission does not believe that anyone approach to physicians' basic medical education should be adopted while all others are dismissed. Given the diversity in patient care needs and in the medical care delivery system—to say nothing of the absence of firm proof that any particular educational approach can achieve predictable ends in the full range of educational settings—diversity in the goals and techniques of medical education is reasonable. However, since the Commission believes that physicians are responsible for ensuring that patients can participate as far as possible in decisions about their care, medical educators ought to train students to carry out this obligation. Such education and training should not only equip students with necessary communication skills but also lead them to value the patient as a full participant in medical decisionmaking.

This goal is more easily stated than accomplished. Indeed, there are certain irreducible problems inherent in medical education and in being a physician. As a leading philosopher of medical ethics has commented: “[N]o amount of change in medical education or public education will solve the moral problems in medicine; at best it can merely increase the quality of thought that is brought to bear on them.”³⁹ While recognizing that education will not resolve all the problems, the Commission agrees with Eric Cassell, a prominent physician-educator that:

A doctor who listens skillfully and who is as careful with words as with drugs has the basic tools for the recognition and relief of suffering. Therefore, training in

³⁸ There is extensive literature on the professional socialization of medical students that analyzes the effect of the overall structure on the development of attitudes and behaviors. One of the most difficult dilemmas facing students involves learning to maintain some emotional distance from patients while being compassionate. *See, e.g.,* Robert K. Merton, George G. Reader, and Patricia L. Kendall, *THE STUDENT PHYSICIAN*, Harvard Univ. Press, Cambridge, Mass. (1957); H.S. Becker *et al.*, *BOYS IN WHITE*, Univ. of Chicago Press, Chicago (1961); Leif and Fox, *supra* note 20; Eileen C. Shapiro and Leah M. Lowenstein, eds., *BECOMING A PHYSICIAN: DEVELOPMENT OF VALUES AND ATTITUDES IN MEDICINE*, Ballinger Pub. Co., Cambridge, Mass. (1979); and Oratz, *supra* note 22.

³⁹ Gorovitz, *supra* note 5, at 208.

communication must enter the medical-school curriculum. Physicians must also (and can) be taught how to weigh and evaluate subjective and value-laden information in equal partnership with objective data and scientific thinking. Otherwise, responding well to sick patients (rather than merely to their diseases) will remain the property of an intuitive few.⁴⁰

Therefore, the Commission commends continued and expanded efforts to devise innovative training programs and urges that they be accompanied by evaluation efforts to discover which changes in medical education produce “better doctors” in terms of the issues discussed here.

Postgraduate Training. Residency level training provides an opportunity to reinforce and synthesize the skills and values learned in medical school; indeed, some believe that such training may be an ideal time to teach the humanities and ethical analysis and to refine interpersonal skills. The testimony heard by the Commission suggests that physician roles in patient communication are shaped very differently depending on the specialty. Residency training in some specialties, most notably family practice, recognizes the primacy of the patient and explicitly trains physicians to encourage participation by patients in decisions, while many of the hospital-based specialties devote almost no training time to such issues.⁴¹ Even in situations where patient contact is limited and time is short, communication is important; in fact, there is still more reason to train such physicians well in interpersonal skills in order to make optimal use of the time they have with patients.

The education of physicians does not end with medical school, residency training, or specialty fellowship programs. Recent developments in biomedical knowledge and techniques are so great that to remain competent a physician must be continually engaged in education and retraining.⁴² Such a process—whether conducted at large conferences, through intensive seminars, or by means of written and recorded materials—ought to include attention to new thinking about bioethics, such as the findings and recommendations of this Report, as well as to new laboratory and clinical findings.

Examinations. The Commission recommends that the issues discussed here be incorporated not only in examinations in medical school but also in national medical board and specialty board examinations. Teaching medical ethics and the humanities principally as electives and enhancing communica-

40 Eric J. Cassell, *To the Editor*, 307 NEW ENG. J. MED. 759 (1982).

41 Testimonies of Drs. Eugene Hildreth, Lynn P. Carmichael, and John Steinhaus, transcript of 19th meeting of the President’s Commission (April 3, 1982) at 153-89.

42 Most states now require physicians to have a certain number of hours of continuing education credits in order to renew their licenses.

tion skills on an ad hoc basis makes it too easy to dismiss these issues as unimportant or tangential to medical practice. But if students and faculty know that these topics are on national examinations they are likely to view them as essential elements in the education of future physicians.

The central difficulty, of course, lies in designing appropriate exams, since what is ultimately of greatest importance is not knowledge per se but attitudes and behaviors. Careful consideration should be given to testing students in this regard.⁴³ The efforts of the American Board of Internal Medicine to incorporate these issues into its residency training programs and into its certification examination should provide valuable experience for leaders in other areas of medicine who are trying to respond to this important issue.⁴⁴

In all of these areas of medical education, from selection criteria to examination, the American Medical Association and other professional bodies at the state and local levels exert considerable influence.⁴⁵ Therefore, the Commission hopes that these groups will give careful consideration to the recommendations in this Report in order to effect some needed changes in medical education.

Innovations in Nursing Education

Like medical education, nursing education is undergoing major changes. Ironically, while medical education is responding to social pressures to become "more humane," nursing education is under pressure (from the health care delivery system and from within the profession) to become more "scientific" and more technologically sophisticated. Many of the changes suggested in medical education are already an integral part of professional nursing education, which traditionally has placed great emphasis on respect for patients' values, the therapeutic importance of patient participation in health care decisionmaking, and the teaching of good communication skills.⁴⁶ For nursing, the more urgent changes would

43 Although multiple-choice questions have been used in the context of case studies to examine the process of clinical reasoning, they are probably not appropriate to measure compassion and the humane practice of medicine. Instead, efforts must be made to devise revealing case studies, develop essay questions, or even incorporate the issues into oral examinations for specialty boards. The potential subjectivity of the last two methods will have to be weighted against their ability to produce valid assessments of physicians' attitudes and problem-solving abilities.

44 American Board of Internal Medicine, *Report of Task Force II*, Newsletter, Philadelphia (January 1981) and Testimony of Hildreth, *supra* note 40.

45 David Mechanic, *MEDICAL SOCIOLOGY*, Free Press, New York, 2nd ed. (1970) at 400-04.

46 The President's Commission brought together a group of nursing

seem to be in the practice context, for it is in patient care that nurses often face a divergence between what they have been taught to do (and believe is right) and the actual role they are permitted to play due to ambiguities in the law, in practice, and in the profession itself.⁴⁷

Full discussion of the sources and resolution of this problem would go well beyond the scope of this Report. This question is currently being studied in depth by the National Commission on Nursing, an independent commission that was established with funds primarily from the American Hospital Association, and that includes representatives from medicine, nursing, hospital administration, and other groups.⁴⁸ In this section of the Report the Commission focuses on several changes in nursing education and practice that could have major consequences for the involvement of nurses in the informed consent process as well as for the nature of the relationship between care-givers in medicine and nursing.

Changes in Skills and Responsibilities. Nursing practice has changed dramatically in the last 40 years. Increased technology coupled with shifts in disease patterns have led to a major restructuring of the health care delivery system. Recently, perhaps partly as a reflection of the women's movement, the nursing profession has become more assertive and concerned about being recognized in its own right rather than as a mere handmaiden to medicine.⁴⁹ These changes in practice and orientation have been accompanied by significant changes in nursing education. Two- and three-year diploma schools are being superceded by baccalaureate programs whose graduates are in turn increasingly going on for advanced degrees.⁵⁰

Traditionally, nurses were educated primarily to carry out physicians' orders regarding medications and treatments and to provide comfort and support to patients. Nurses today are prepared in the direct application of complex technologies to patient care. Students of nursing learn to develop nursing care plans for patients that require skills in history-taking, physical

experts from all over the country in March 1981, *see* Addendum, p. 191 *infra*, to discuss the issues addressed in this Report generally and this section specifically. *See also* Claire Fagin, Margaret McClure, and Rozella Schlotfeldt, *Can We Bring Order Out of the Chaos of Nursing Education?*, 76 AMER. J. NURSING 98 (1976).

47 *See, e.g.*, Linda H. Aiken, ed., *NURSING IN THE 1980s: CRISIS, OPPORTUNITIES, CHALLENGES*, J.B. Lippincott, Philadelphia (1982).

48 Although this Commission has not completed its work, in September 1981 it issued an *Initial Report and Preliminary Recommendations*.

49 Aiken, *supra* note 47.

50 *See, e.g.*, J.C. Vaughn, *Educational Preparation for Nursing-1979*, 1 NURSING AND HEALTH CARE 6 (1980).

examinations (which may include diagnostic procedures), and the independent generation of nursing care procedures.⁵¹ In addition, their traditional training in communication skills has expanded. With the shift in disease patterns toward chronic illnesses, nursing education has increased its long-established emphasis on the skills needed for educating patients, especially about self-care techniques and the long-term management of disease. Consumer demands for information and the self-help and health promotion movements have also had their effects on nursing education. More than ever, nurses see themselves as patients' advocates—assisting patients to achieve better health and more-effective participation in their own health care.⁵²

One of the stated functions in nursing codes and state laws, often under the rubric of "patient education," is to prepare patients by providing information about their condition and treatment, alternatives, risks, and benefits.⁵³ This responsibility is often shared with the attending physician, who may specifically delegate it to nurses,



although it may be carried out independently by nurses in the course of treating patients. When this is a shared or delegated function, nurses are responsible for following orders knowledgeably and for bringing errors, omissions, and misunderstandings on the part of patients to the attention of physicians. Although ultimate legal responsibility varies according to the context in which care is delivered, the nature of the intervention, and the person treating the patient, nurses as a practical matter typically have a central role in the process of

51 Testimony of Patricia Balassone, transcript of 19th meeting of the President's Commission (April 3, 1982) at 208-18.

52 This is reflected in changes in the code of nursing ethics between 1950 and 1976 and in statements at nursing schools on the philosophy of nursing, which guide curricular development. See also Catherine Norris, *Self-Care*, in Barbara W. Spradley, ed., *READINGS IN COMMUNITY HEALTH NURSING*, 2nd ed. (1982) at 214-19.

53 See, e.g., Anne J. Davis and Mila A. Aroskar, *ETHICAL DILEMMAS AND NURSING PRACTICE*, Appleton-Century Crofts, New York (1978) at 67-88.

providing patients with information.⁵⁴

Early graduate programs at the master's level established in the 1950s prepared nurses to be administrators and teachers. By the 1960s, however, mirroring the trend in medicine, the emphasis in nurses' graduate education shifted towards more clinical training and specialization in such areas as intensive care, pediatrics, cardiology, and orthopedics. With the nurse-practitioner movement came a new awareness by other health care providers and the public of the clinical capabilities of nurses.⁵⁵ Today nursing is moving to strengthen its role as a distinct profession, without trying to imitate medicine, and to specify more clearly the contributions of nursing to patient care. As a profession, nursing is demanding more responsibility as well as more legal, moral, and practical accountability.⁵⁶

Relationship to Medicine. With all these changes, professional nursing and medicine have become both more independent and more interdependent. On the one hand, nurses with graduate training and nurse-practitioners (including midwives) are increasingly caring for patients on their own. Especially in ambulatory settings and in nursing homes, nurses may sometimes do checkups, chronic disease follow-up, and some management of acute disease; they may order tests and initiate therapeutic interventions, sometimes with a physician's cosignature and other times independent of physicians.⁵⁷ In these cases nurses have full responsibility for informing patients about their conditions, treatments, and tests, for ensuring that the patient has understood the information, and for securing consent.

In some areas, on the other hand, greater interdependence exists among health care professions, most notably in hospitals.⁵⁸ As the roles and functions of physicians and nurses overlap more, there is an even greater need to coordinate patient care activities. Such coordination requires that both professions understand each other's capabilities and work together to foster patients' well-being.

In recognition of the need for coordinated team practice, the American Medical Association and the American Nurses' Association established the Joint Practice Commission, which

⁵⁴ *Id.*; Teresa Stanley, *Nursing*, in Warren T. Reich, ed., *ENCYCLOPEDIA OF BIOETHICS*, Free Press, New York (1978) at 1138-45.

⁵⁵ See, e.g., Loretta C. Ford, *Nurse Practitioners: History of A New Idea and Predictions for the Future*, in Aiken, *supra* note 47, at 231-47.

⁵⁶ Aiken, *supra* note 47; Stanley, *supra* note 54.

⁵⁷ The requirements for nursing orders to be cosigned by physicians vary according to the nature of the medical intervention and to the requirements of state laws and third-party reimbursers (both federal and state).

⁵⁸ See, e.g., Ingeborg G. Mauksch, *Nurse-Physician Collaboration: A Changing Relationship*, 11 *J. OF NURSING ADMIN.* 35 (1981).

operated from 1971 to 1980. In its *Guidelines for Establishing Joint or Collaborative Practices in Hospitals*, the Commission recommended the formal institution of joint practice and outlined the necessary elements in the functional relationships between professionals involved in direct patient care and the administrative structure that supports those activities.⁵⁹ The President's Commission commends the work of the Joint Practice Commission and agrees that explicit attention should be paid to furthering the goals of coordinated team practice among professionals who have completed their formal education.

The Commission further encourages joint training programs for students in the two professions, since most nurses and physicians ultimately practice in teams. Only a few small experiments have tried to train medical and nursing students together. More frequently, students of one profession have been taught by faculty from the other or by teams of physicians and nurses. There are many logistical and attitudinal barriers to joint training, which seem to have curtailed the expansion of such programs. Typically, it is not until residency training that physicians begin to appreciate nurses' skills and the need to coordinate patient care activities. Although the Commission heard some testimony suggesting that residency was the optimal time to train physicians for team practice, others argue that earlier exposure of the two professions to one another is preferable.

In the Commission's view, coordination and understanding among the various professionals facilitate optimal patient care and the provision to patients of an effective basis for participation in health care decisionmaking. More study by the professions and by Federal officials with responsibility for health care and education is clearly needed. But enough is already known to recognize the value of the emphasis placed by professional nursing on the education and involvement of the patient, as well as the need for further efforts at joint training of nurses and physicians throughout their clinical preparation.

⁵⁹ *Guidelines for Establishing Joint or Collaborative Practices in Hospitals*, National Joint Practice Commission, Chicago (1981).

