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A LATE START INTO MEDICINE: CAREER PATHS AND PATTERNS

City University of New York

Ph.D. 1982

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A LATE START INTO MEDICINE:

CAREER PATHS AND PATTERNS

by

IRENE RAYMAN LEVITT

A dissertation submitted to the Graduate Faculty
in Sociology in partial fulfillment of the
requirements for the degree of Doctor of Philosophy,
The City University of New York.

1982

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1982

This manuscript has been read and accepted for the Graduate Faculty in Sociology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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I'm thirty-six years old and I have not had a vacation in seven years. I had a lot of outside activities. I was very well read . . . and I think I had a well-rounded education. I knew a little bit about everything. And now, I feel that I am very limited when I know that I have no time to read a newspaper, magazine, or novel. I don't even listen to the news on television, other than what I pick up here and there. My whole world has been medical books, and I feel that my whole spectrum has been tremendously narrowed. And, also, my activities. And so I had to sacrifice all these. And, therefore, looking back, you know, you only go through life once. And you say, well, is it worth it? It's hard to say, because again, I can never recapture these years. They're gone. . . . But, then, I look to the future. I think as long as you look to the future and see what you can do in the next ten to fifteen years-- it's a different stage of your life. And if you can justify to yourself that it will be rewarding, then I think that what's behind you, you can overlook. [39]

(A fifth-year resident in plastic surgery,
with two years of training left)

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Chapter 1

Introduction

The entrance to certain occupations, notably the professions, is governed by age limitations in many cases. Age, therefore, becomes an important contingency factor in understanding the processes of occupational choice and career development.

Medicine is one profession which virtually precludes a late decision to enter, as evidenced by medical school entrance criteria and policy. The average age of accepted applicants has been persistently between twenty-one and twenty-three. Five percent or less have been twenty-eight years or older at matriculation.

The age of recruits to the medical profession is the subject of many assumptions which have, in turn, led to untested beliefs. Because medical training is so long--a minimum of five years and as many as eleven, following the baccalaureate degree--before a physician qualifies in his chosen area of practice, it is assumed that the decision cannot be delayed. Because it is such a difficult training, it is assumed that only the very young can survive its rigors. Because it is so costly, it is assumed that only the young can manage to practice long enough to make it pay. All of which add up to a rigid proscription against the delay of career decisions for medicine and against the admission into medical school of older applicants.

Yet, one can conceive of important reasons why entrance at a later age could be a positive influence on training for this complex and

demanding profession. For such heavy responsibility, does not the maturity of age recommend itself as a qualification? Is not the sorting out and clarification of identity a process that takes time? Does not the delay of decision also suggest that the accumulation of experience might be advantageous for a medical career?

To address these issues, this study is focused on that group of medical recruits who are definably older, the five percent or so who have begun medical studies at age twenty-eight or older.¹ To our knowledge, this population has never been systematically studied, either by the medical community or by members of the social and behavioral sciences.

The specific research objectives are twofold: (1) to examine older matriculants as a specific segment of the physician population with a focus on the process involved in a late start into medicine, and (2) to examine older matriculants as a specific segment of the physician population with a focus on the outcome or implications of a late start into medicine.

Gough (1967) cites six natural points of decision-making in a medical career which occur during the following periods: when the individual chooses to take a premedical course of study; at the time of application to and selection for medical school; during the medical school years; when the application for internship and residency is initiated; at the time of entry into practice or into a position of teaching and research; and during professional practice. We will look for patterns in the process of a late start into medicine, using these points in time as a model. The basic research questions will be:

- Why and how have these individuals come to pursue a career in medicine at this point in their lives?

- What are the personal-subjective and/or structural-environmental factors that have influenced this decision? Was medicine something the individual always wanted to pursue, but could not because of personal or situational factors? Or, was the decision a result of dissatisfaction with some earlier training or experience?
- How do older and younger matriculants compare in terms of medical education and training? Do they have the same opportunities for education, post-graduate training, colleague and peer support? What factors influence the choice of medical schools and training programs?
- What are the career patterns of older matriculants as compared with those of their younger peers? Are their actual choices also their preferred choices? Or, is there a "mini-max" principle operating (Sherlock and Morris, 1972)? For example, do older matriculants choose areas which offer maximum rewards with a minimum of input? Do they attempt to compensate for their delayed training by choosing career patterns which offer more immediate gratification and the least resistance, such as general practice, rather than the medical specialties which in contrast require lengthy training and are highly competitive? Are older matriculants in some way more "humane" or "socially concerned" than younger matriculants? What factors influence practice arrangements? Are older matriculants more likely to be found in solo, group, or organizational settings?
- How does the sex of the older matriculant affect the

decision to enter medicine and the ensuing career pattern?
Do male and female older matriculants differ from each
other? Do they differ from younger colleagues of the same
sex?

Research Procedures

Concerning older applicants as a pool of medical recruits, data exist on their numbers and acceptance rates into medical school over the years; however, a more in-depth understanding of the process of recruitment into medicine, the development of a commitment to it, and the choice of various career patterns appear to be lacking. The proposed research is a step toward filling this gap. It is necessarily exploratory in nature, because of the limitations of data and resources.

The available data clearly show that older applicants encounter special difficulty in gaining acceptance. Defined as age twenty-eight or older, they represent approximately ten percent of all applicants to each year's entering medical school class in the United States, yet, of the total applicant pool, approximately five percent are accepted. For this research, therefore, a sampling problem was faced at the outset in that a relatively small proportion of the existing physician population is comprised of older matriculants.

To ensure comprehensiveness in scope and content, both quantitative and qualitative approaches to data collection and analysis were used. The first involves a secondary analysis of a computerized data base on physicians; the second involves in-depth interviews with physicians.

American Medical Association Physician Masterfile

The major source of data on physicians in the United States is the American Medical Association Physician Masterfile. Since 1906, the American Medical Association (AMA) has maintained detailed records on every physician practicing in the United States. A physician is first entered into the file upon entry into medical school, or in the case of foreign and Canadian graduates, upon entry to the States. As a physician's training and career develop, additional information is added to his file--for example, residency training, licensure, board certification, etc. Although such characteristics change over time, they are not subject to constant change and are thus included in the "historical" portion of the file. In addition, there is the "current professional activities" section which is subject to constant change, and therefore updated through intense monitoring techniques. Since 1963, improved record-keeping (particularly with regard to foreign medical graduates) has resulted in the AMA Physician Masterfile being the most comprehensive and complete source of data on the United States physician population (Haug and Martin, 1971; Goodman, 1977). It catalogues and computerizes data on the following factors:

- Name
- Address
- Medical Education (state or country; medical school; year of graduation)
- Sex
- State or Country of Residence
- Birthdate
- Birthplace
- Citizenship and Visa codes
- State Licensure Data
- National Boards
- Major Professional Activity
- Specialty (primary, secondary, tertiary)
- Federal or Non-Federal Employment
- American Specialty Boards

Specialty Societies
Current Medical Training (internship and residency)
Current Government Service

A secondary analysis of these Masterfile data for a selected sample of physicians is one of the main steps in this study's research design. Its basic research question is: Do older matriculants differ from younger matriculants? If so, in what ways? Using the variables contained in the Masterfile, bivariate and multivariate analyses have been applied (Zeisel, 1968; Rosenberg, 1968).

The AMA file contains data on approximately 400,000 physicians licensed in the United States. However, the AMA Division of Data Release policy allowed for information on not more than 5000 cases, to be selected from the complete base. This presented problems in terms of how many older and younger matriculants to include in the sample, and for which years of matriculation to medical school. To allow for comparison, we sought to construct a sample with at least half older matriculants and the rest, younger matriculants.

Age at matriculation to medical school is the primary independent variable of interest. Concerning our definition of older matriculants as those who began medical school at age twenty-eight or later, this conception was based on an examination of medical school application and admission data, which indicate that most accepted applicants are younger than twenty-eight. Age at medical school graduation--not matriculation--was used by the AMA in selecting the study sample.

While age at graduation is not perfectly correlated with age at entrance, due to different rates of progress through medical school, and some three-year programs, it can nevertheless be used as a close approximation. Since the literature on age, selection, and recruitment

into medicine typically refer to age at matriculation rather than age at graduation, we decided to make the AMA sample consistent with the prevailing definition. We subtracted four years from "age at graduation" (as provided by the AMA) for each sample respondent to arrive at an estimate of age at matriculation.

Based on admission data, it could be estimated that approximately five percent of each year's entering medical school class, or about five hundred students, would fit our definition of the older student. In order to yield a sample of approximately 2500, five or six key years were necessary. In preparation for the sampling decision, the AMA provided us with actual figures of the number of graduates, by age, for the individual years 1967 through 1972. There were 2705 older matriculants and 73,506 younger matriculants. Rather than the use of consecutive years, however, we felt that a broader span of time was indicated to allow for the inclusion of possible period effects. For instance, it might be possible that labor market conditions or the Vietnam War has affected the recruitment and selection of individuals into the medical profession, with the age of the individual as a contingency factor. On the other hand, it was necessary to keep the years fairly recent so that the findings of the AMA data would be useful and relevant to the second phase of research, the in-depth interviews with older matriculants. With these considerations in mind, the following key years were selected for sampling purposes: 1963, 1968, 1970, 1972, 1977. These years provide a fairly broad span of time and coincide with the years of graduation of the physicians to be interviewed. In addition, a further advantage is gained by including those who graduated in 1970 or before since they will have been in practice between

ten and seventeen years at the time of the study. Thus, they can be expected to have completed postgraduate training, board certification and licensing, and have established professional affiliations, allowing for an examination not only of specialty choice per se, but of career patterns as well.

To ensure an adequate number of older matriculants in the sample, given their small representation in the population, they were deliberately "oversampled." All later starters for the key years 1963 through 1977 were included in the sample. This accounts for 62 percent of the total AMA sample. The remaining cases, those age twenty-seven or younger at matriculation, were randomly selected, to account for 38 percent of the sample.

The final total sample consisted of 4143 physicians practicing in the United States. The sample was deliberately limited to American citizens, since it was not possible to distinguish foreign citizens who might return to their homeland from those who would remain in the United States. The sample is fairly evenly distributed in terms of year of graduation from medical school, with a slight concentration of more recent graduates. The range is as follows: 1963 (20 percent); 1968 (15 percent); 1970 (15 percent); 1972 (18 percent); and 1977 (32 percent). The total sample was 4143.

At the time of sample selection, the most recent information on each cohort was obtained by the AMA in 1977. Consequently, virtually all 1977 graduates and some 1972 graduates were in postgraduate training. For some portions of the analysis, 1977 graduates, specifically, or all those in training will be excluded to focus on those "physicians-in-practice" whose career commitments are more firmly established.

Generally, the analysis will use the dichotomy "older" and "younger" matriculants. However, on a rare occasion, the older matriculant category will be further divided to include those age twenty-eight to thirty-one (45 percent) and those thirty-two and older (17 percent) to see if the degree of delay in pursuing medicine is significant.

In-Depth Interviews

The AMA data were used to provide a profile of physicians, by late or early start into medicine, in terms of their professional practice characteristics and patterns. In order to explore the broader issue suggested by this research--career choice and career change--a second research technique was implemented. A small sample of physicians (approximately sixty) were studied in depth, adding a more qualitative component to the research. The focus was on the process involved in a late start into medicine rather than on the outcome of that decision.

The original plan was to interview physicians-in-practice, those who had completed medical school ten to fifteen years ago. This was to allow sufficient time for the physicians to have established a medical career in terms of specialty choice and geographic location. The sample was to be selected informally, using known cases obtained by word of mouth or through reports in the media. This procedure was tried, and although surprisingly successful in the cooperation of

those located, it was unsuccessful in the number of individuals able to be located. This was particularly problematic in that the limitations of our resources required that the interviewing would be done in the New York metropolitan area. This limits the potential number of older matriculants to be included in this study. The most available and accessible respondents seem to be undergraduate medical students and postgraduate students (i.e., those in residency programs, also referred to as housestaff officers). While medical students could provide ample information on the decision to enter medicine, little could be said about specialty choice, because many delay their final decision until the end of the last year of school. In addition, if the interviewing was to be confined to New York, the number of older matriculants (particularly those in their last year) might be too few. Residents were chosen because they have made decisions regarding specialty choice, thus allowing for an examination of both the process of choosing medicine as a career at a late age and the outcome of that decision. An additional advantage was that they were still close enough in time to the decision-making process (compared with those who have graduated ten to fifteen years ago), so that there would be less chance for distortion of reported attitudes and events. The primary advantage, however, was their accessibility.

The Committee of Interns and Residents (CIR) is the New York City housestaff association, which has thirty-four member hospitals in the metropolitan area. This includes all most hospitals and some voluntary hospitals. In all, there are approximately 4000 individual members. This association provided an ideal target population for the interview phase of the research. The principal investigator had

previously been involved in a study of this organization during 1975 through 1978, so that rapport was already established with the executive director and other staff members. This facilitated gaining access to the members. The CIR maintains a membership card for each individual member, arranged according to hospital. These cards were made available for sampling purposes. The cards did not have specific data on age at matriculation to medical school. However, this was easily determined by other available data, such as the year of birth and the Postgraduate Year Level (PGY). For example, an individual who was at PGY-2 (as of July 1, 1979) probably graduated from medical school in June 1978, and began medical school in September 1974. Subtracting the year of birth from the year of matriculation to medical school, we get a highly accurate estimate of age at matriculation. Similar to our sample from the AMA Masterfile, the sample of older matriculants (those age twenty-eight or older at matriculation) was limited to those who were American citizens. A substantial proportion of New York City house-staff are foreign-born and foreign-educated physicians, many of whom are older because they come to the United States after training in their country of origin. We did not want to eliminate American citizens who trained abroad, however, since there are likely to be a substantial number of older matriculants who are unable to gain admission to American schools. The membership cards allowed for a determination of citizenship by asking the member to indicate visa status. Those who indicated they were not citizens were omitted from the population, regardless of their age at matriculation. Using the above criteria, a total of 148 older matriculants were selected, representing the total number of older matriculants in the CIR population.

These individuals were contacted by mail with a request for an interview. The letter was sent to the home address, which had been verified using a list updated regularly. The respondent was given two choices: (1) to contact the interviewer; (2) to be contacted by the interviewer. To facilitate the first option, potential respondents were given the interviewer's telephone number and address; to facilitate the second, the interviewer enclosed a self-addressed postcard providing a space for the potential respondent's telephone number. Virtually all who replied preferred to be contacted by the interviewer. A second, follow-up, letter was sent to those who did not respond within two weeks. The goal was to interview approximately sixty individuals.

We did not anticipate difficulty in obtaining the cooperation of housestaff; however, the amount of time they have available was often a problem. The schedule of a resident is demanding in the number of hours worked a week as well as the type of work performed. Many work thirty-six hours consecutively when they are "on call," and most work at least eighty to one hundred hours a week. Their schedules are not often predictable in terms of the free time available. Generally, as we knew from preliminary interviews, while there was eagerness on the part of respondents to participate, the actual scheduling of appointments was often difficult. The interviewer arranged the interviews to accommodate the respondents' time limitations to a maximum. However, cancellations and rescheduling were often part of the process. Even when an appointment could be arranged and met, generally the maximum amount of time available was one hour to an hour and a half. This was not always sufficient to cover all the desired information in depth.

In all, fifty-four in-depth interviews were completed during 1979-1980. The majority of interviews, forty-three, were with house-staff officers. The rest included those at premedical phase (two); in medical school (six); and physicians-in-practice (three). Most interviews lasted between one and two hours. Approximately half were done at the respondent's hospital of residence; the rest at the respondent's home or interviewer's home or office.

While the CIR provided a viable and easily accessible population of respondents, there are certain limitations which should be noted. The twenty-two member hospitals, with the possible exception of Montefiore, may be considered to be lower status hospitals. As a consequence of the 1976 and the more recent 1980 CIR strikes, many member hospitals dropped out. The qualitative characteristics in the types of hospitals which are members differ pre- and post-strike. Consequently, the CIR housestaff may not be representative of housestaff in other hospitals. To alleviate this potential bias, an attempt was made to include housestaff from one or two non-CIR hospitals in the sample. This was done using a more informal method of sample selection, using "known" older matriculants as the study population. This included contacts made during the process of planning this research and older matriculants who have received attention in the media (Klemesrud, 1971; Feuchtwanger, 1977; Peterson, 1977; Clines, 1977) as well as in the professional literature (Rice, 1975; Coste, 1975).

The approach used was a nonstandardized, or in-depth, interview (Richardson, 1965; Dexter, 1970; Becker, 1970), to permit flexibility in the topics to be covered, the amount of time devoted to each, as well as in the sequence. This technique is particularly useful when

the respondents are heterogeneous with respect to their backgrounds and personal characteristics, as is likely to be the case with older matriculants. The interview was comprehensive, although not exhaustive.

The interview guide was developed after extensive review of the literature on occupational choice and decision-making, in general, and on the professions and medicine, in particular. The classic socialization studies by Becker et al (1961) and Merton et al (1957) were particularly useful. Informal conversations were held with premedical students, medical students, housestaff, and physicians-in-practice to generate additional ideas for investigation. Once a crude interview guide was constructed, more systematic and formal interviews were conducted with individuals in the above categories to enhance and refine the instrument. (See Appendix 1 for a copy of the instrument.) To promote spontaneity between the interviewer and the respondent, as well as to assure the accuracy of the data, a tape recorder was used with the permission of the respondent. Each interview was transcribed, altogether yielding approximately 2000 pages of transcription. We examined patterns of ideas, attitudes and behavior. The analysis focused primarily on the atypical medical recruit--that is, older matriculants into medicine. There is a wealth of information in the literature on the typical medical student, the decision to enter medicine and choice of specialty, which was used as a basis for comparing older and younger matriculants.

The Plan of Analysis

The discussion will follow the order of the list of operational questions above (pp. 2-4).

To clarify the general problem of inquiry, Chapter 2 focuses on the background literature on medical manpower from which the basic issues of the relative age at career onset appear to emerge.

Chapter 3 deals with the first steps of study, experience and work for our sample of older medical recruits. By definition, these persons have experiences that intervene between undergraduate college and their entrance into medical school. What did they do? What, if anything, can be discerned as a patterning of experience in these intervening years?

Chapter 4 continues discussion of premedical experience, but focuses on the decision to seek medicine as a career. What factors influence such decisions that can be related to the delay of this career decision?

Chapter 5 begins to examine the impact of age at matriculation on the pursuit of a career in medicine. It focuses on the first formal phase of this process, medical education and training, both at the undergraduate and postgraduate level.

Chapters 6 through 8 continue this analysis with an examination of the career patterns of practicing physicians. Chapter 6 looks at specialty choices; Chapter 7, the nature of the work setting, including location and practice arrangement. Chapter 8 looks at the variations in careers according to the sex of physicians.

Finally, we will look at the implications of a late start into medicine, with reference to our basic list of questions, and draw some interpretive conclusions.

Notes

¹The definition of older matriculant as an individual who was age twenty-eight or older at the time of matriculation into medical school was chosen on the basis of medical school application and admission data, which indicate that most accepted applicants are age twenty-seven or younger (AAMC, 1981). This definition allows for the inclusion of those who graduated from college at the typical age, but delayed applying to medical school as well as those who may have graduated from college at a late age.

²The "over-representation" of older matriculants should be noted when reading data presented in Tables. Tables which show a distribution of the total sample, for instance, "Location of Medical School Attended" (Table 1, Chapter 5), may reflect the greater proportion of older matriculants.

Chapter 2

Background: Age-Related Issues of Recruitment and Selection Into Medicine

Medicine was not always selective in its recruitment policies. Until the first World War, medical schools in the United States more often than not did not require any prior college education. Some schools admitted students who had not completed high school. Over 400 medical schools were started in the United States during the nineteenth century, and the ratio of physicians to the population was more favorable than in 1960 (Stevens, 1971; Rothstein, 1972).

Selective recruitment began to be widespread only after 1910. The result was to curtail the numbers of physicians trained, so that during the next half century, serious problems developed in the distribution and ability of medical manpower to serve the needs for health care of the nation, especially among segments of the population such as the urban poor and the rural.

The age of medical recruits, we would contend, can best be understood in the context of questions of manpower. Two issues have received considerable attention in the manpower literature: the first is quantitative, in terms of the numbers and distribution of physicians (Fein, 1967; Reinhardt, 1975; Rushing, 1975). The second is qualitative, in terms of who physicians are and how good they will be (Millis, 1971).

Increasing the Number of Physicians and Their Distribution

Continuous debate concerning medical manpower has focused on the adequacy of the number of physicians. Beginning in the 1960s and through the middle of the 1970s, the nation was convinced that we faced a serious physician shortage (Bowers and Purcell, 1978). In a 1970 editorial, the American Medical Association observed that "the blight of medical education in the United States is the shortage of manpower, especially physicians." The American Medical Association and the Association of American Medical Colleges jointly avowed that all qualified applicants seeking admission to medical school should be accommodated and that the schools should increase enrollments substantially. The schools have responded, but slowly and inadequately, according to the American Medical Association. As noted in that editorial, the total first-year classes in 1968 numbered only 9,479 students and by 1973 was anticipated to be no more than 12,000 (Mammot, 1974:37-38). In 1973, the American Medical Association estimated that in addition to the 113 schools then in existence, another one hundred schools of the present average size would be needed to accommodate the number of qualified yet rejected applicants (Egan, 1973).

There have been massive efforts to rapidly increase the number of graduates from United States medical schools. From 1960 to 1978, the first-year enrollment of all medical schools had increased from approximately 8,000 to 16,000; total enrollment had increased from 30,000 to 60,000; and the number of medical schools had increased from 86 to 124 (JAMA, November 23, 1970; Ruhe, 1978; Time, July 10, 1978). Ironically there is now concern that perhaps too many physicians will be produced and that we face a surfeit of physicians (Bowers and

Purcell, 1978; Funkenstein, 1978; GMENAC, 1979).

Gradually, attention shifted from the issue of the sheer number of physicians to that of their distribution, in terms of location and specialization (Erdman, 1978; see also, Millis, 1967; Elam, 1973). In the last fifty years, there has been a recognizable trend toward specialization in medicine (Theodore and Haug, 1968; Kendall, 1971; Stevens, 1971). While formal recognition of the specialties occurred as early as the period from 1910 to 1930, World War II both encouraged the rise of specialization and enhanced the attractiveness of board certification for all physicians (Stevens, 1971). The outstanding feature of the current trend in the United States, as noted by Stevens, is the "decline of the general practitioner and the substantial and continued focus on surgery" (p.441). It is argued that there is an oversupply of surgeons, medical subspecialists, diagnostic radiologists, and academicians and a scarcity of primary care physicians.¹ Funkenstein (1978) has described the period from 1975 to the present as "The Primary Care and Increasing Governmental Control Era" which will attempt to control this trend toward specialization.

Related to the issue of specialty distribution is the question of geographical distribution of physicians. The specialist expects and requires hospital-based facilities and colleagues. Thus, physicians cluster around major metropolitan areas where there are concentrations of both facilities and specialists (Enos and Sultan, 1977; see also, Bloom, 1971). Further, physicians tend to settle among people with whom they feel comfortable, and the class of people from which most of them have come (Zweifler and Corey, 1972).

Various solutions, both long- and short-term, to the

quantitative problems of manpower have been proposed and tried; increasing the number of medical schools; increasing the number of graduates by shortening programs from four to three years; raising the productivity of physicians through better forms of organization for the delivery of health services; employing interns and residents outside the hospital; using ancillary personnel more extensively (Busak and McNamara, 1968; Rushing, 1975). Attempts to ensure more primary care physicians and greater numbers of doctors in medically underserved areas have included the rise in importance of the Academy of Family Practice and the establishment of the Board of Family Medicine in 1969. The climax of these efforts occurred with the passage by Congress of the 1976 Manpower Act, which seeks to control the specialty choice of graduating students and to create a geographical distribution.² (See also, Eisenberg and Cantwell, 1976; Mason, 1976.)

Increasing the Diversity of Physicians

Along with the concern for the quantitative component of health manpower has been the more qualitative issue of what constitutes a good physician (Levine et al, 1974; see also, Fay, 1971; Price et al, 1971). Traditionally, the medical education process has been designed to turn out a single product--the physician--and not an array of physicians. The products are much more alike than they are different. The admission process selects a remarkably homogeneous group of medical recruits in terms of what they know and can do, as well as in their intellectual and social outlooks, and their personal and cultural heritages (Doebler, 1967; Millis, 1971; Elam, 1973; Thorne, 1973). It is noted in medical school catalogues, according to Jason (1972:663), that medical schools

seek to produce some variation on the theme of the "compassionate, scientifically astute, selfless, responsible physician who will continue to grow through self-learning throughout his or her professional life." According to Myckalyn (1973:1119), however, the medical school may both hinder as well as enhance this process:

Like the cloistered monk, the medical student leads a very constricted and dependent existence. Usually the young adult recognizes his basic tasks of occupational identification and the growth of a capacity for intimate relationships with others. The medical student is no exception to this rule. However, the student physician is too preoccupied with the task of becoming a doctor, not only in acquiring the knowledge and skills of the doctor, but also the more subjective attributes: the inner feeling of becoming and being a doctor, the certainty that the role fits him and that society approves and accepts his newly acquired role behavior. Learning to identify with his profession involves not only attending classes, clinics and the laboratory, but interacting with his peers, instructors, and his patients. The intensity and concentration of this process force the student to constrict his range of interests and outside pursuits within the sequestered medical environment. Much of outside living escapes the medical student. Winnecott stated, 'The doctor's long and arduous training does nothing to qualify him in psychology and does much to disqualify him. It keeps him so busy from 18 to 25 he finds he is middle-aged before he has the leisure time in which to discover himself.'

This pattern is reinforced by the selection process, which is primarily directed at finding individuals who are likely to survive the first year of medical school, where virtually all the attrition occurs, but where few of the characteristics of the effective physician are required for success (Jason, 1972). The emphasis has been on producing competent physicians and the standards of competence have overwhelmingly if not exclusively been technical and quantitative. Geiger and Sidel (1976:23) argue that "there is a broader answer. The purpose of medical education is to produce competent physicians to help meet the health care needs of all our population. For this purpose, competence must include technical knowledge and humane concern and cultural and social

diversity." This raises the question of the source of medical recruits (Bradford, 1973), and whether or not more variation in physician attributes and capabilities is necessary (Levine et al, 1974). In this vein, Jason (1972:663) states, ". . .if we truly want to graduate physicians with particular attributes, the most potent of the available leverage points would be the process of recruitment and selection." Thus, an additional solution to the manpower problem is to increase the heterogeneity of medical recruits. There appears to be a growing realization that the health care system needs physicians of many kinds, and that the only way to ensure diversity of output is to have diversity of input (Millis, 1971).

Congress has recognized a need to control the numbers of physicians in various specialties. A Graduate Medical Education National Advisory Committee was appointed to study this matter and to examine the issue of selection in terms of whether the admission of students with certain personal characteristics favor one specialty or one group of specialties (Stevens, 1971). One means of influencing selection is to recruit from largely untapped sources, as exemplified by The Medical School at the State University of New York at Stony Brook, Long Island. Officials at Stony Brook, which accepted its first class in 1971, say they ". . .rely on the variety of its student body, the acceptances of unusual backgrounds in some of the students and on some unusual teaching techniques to train not only efficient doctors but--to use a word that is often heard around here--'humane' ones as well." Among the 1977 entering class of forty-eight students were a thirty-year-old former New York City policeman, who flunked out of college at age seventeen, joined the Marines, and after walking a beat in East Harlem went back to night

school for four and a half years before beginning medical school; a thirty-year-old former member of the board of directors of the East Harlem Day School; and a thirty-four-year-old former Navy hospital corpsman. Stony Brook is not the only school in the country that has argued in favor of looking beyond test scores and college grades, but rather ". . .to the character of the student in searching for people who would make not only good students, but also good doctors." (Peterson, 1977: 3). In recent years, the emphasis has been on increasing diversity of medical recruits from the formerly untapped racial and ethnic minorities, and women.³ Other sources have included some very young and gifted individuals, those with non-science majors, and those with advanced degrees.

Trends in Recruitment and Selection

Since for all practical purposes, admission to medical school is tantamount to entry into the profession, the recruitment and selection process becomes an important consideration. The admission procedure has a profound influence on who becomes a physician (Millis, 1971). Admissions committees have favored the selection of students with strong science backgrounds and high science aptitudes (Bradford, 1973; Rhoads, 1974). Most students interested in a medical career, therefore, pursue a similar science curriculum in college. A survey of the premedical subjects required by 115 medical schools in the United States and Canada for the 1975 entering class revealed a heavy emphasis on biology, organic chemistry, general physics, and math. In comparison, few schools required courses in the behavioral and social sciences. This emphasis is illustrated by examining applicants to the 1975-76 entering class by

their undergraduate major. Seventy-one percent of the applicants had an undergraduate major in biology, chemistry, zoology, premed, and other miscellaneous science, with biology accounting for over one-third of the majors. The remaining 29 percent had non-science majors.

The academic performance of entering medical students is also remarkably similar. A high grade average in college as a criterion for admission to medical school has become more important in recent years. For the 1975-76 entering class, 44.2 percent had grade averages of A (3.6-4.0); 47.4 percent had grade averages of B (2.6-3.5); and 2.4 percent had grade averages of C (below 2.6). In contrast, among entrants to the 1971-72 entering class, the respective figures are 24.0 percent, 70.0 percent and 6.0 percent (AAMC, 1978). The result has been an extremely homogenous population of physicians along a number of parameters.

Even with such restrictive admission criteria, though, the number of applicants has risen steadily from 1960, with 14,952 applicants, through 1974, when the pool reached a record total of 42,624, and then began its decline. The decline is said to have been predictable. It has been known for many years that there was a fairly close correlation between the number of medical school applicants and the size of the twenty-two-year-old population in the United States. When the twenty-two-year-old population declined in the 1950s, the medical school applicant pool also declined. Similarly, the post-World War II baby boom was followed by a record twenty-two-year-old population in the 1970s and a record number of medical school applicants (Ruhe, 1978).

In addition, other reasons have more to do with the nature of the medical school experience itself. "Becoming a physician," applicant dropouts are saying, "is just not worth the effort," according to a

recent report (Time, July 10, 1978:66). One contributing factor appears to be the cost of medical education. Government loans and scholarships are scarce; tuition is rising, as are the cost of books, room and board. The prospect of earning sufficient income to cover the cost of malpractice insurance or to repay debts after graduation is doubtful for many students. Further, students dislike the idea of investing five to ten years in training. There has also been a drop in the number of students who manage to complete their premedical studies, due in part to worsening high school preparation in the physical sciences and lack of intellectual discipline, according to a premedical studies director at a state university (Time, July 10, 1978).

Rising competition, as well, has added to the changing attitude toward medicine as a desirable career. Even though the number of available places has increased over the years, the acceptance rate has continued to decline. Nearly 60 percent of applicants were accepted in 1960-61 compared with 39 percent in 1977-78 (Ruhe, 1978). No other occupation rejects so many able candidates. Better guidance from premedical counselors has allowed students to more accurately determine their chances of getting into medical school (Time, July 10, 1978).

Age as a Factor in Application and Admission to Medical School

The attitude and behavior on the part of many medical school admissions committees has been to discourage older individuals from pursuing a medical career. As stated in the Medical School Admissions Requirements Book published by the Association of American Medical Colleges each year (1974-1975 edition):

Age can be a distinctly limiting factor in gaining admission to medical school--so much so that the older premedical student should consider very carefully before continuing in his educational preparation for medicine. The preferred age range for applicants to medical schools is 20 to 26 years old, although not all schools have written policies in this respect. More than half the medical schools do not deviate from their age preference except in occasional instances for unusual students. An applicant under 20 or over 26 may have difficulty getting into medical school without unusually strong qualifications. An applicant over 35 should anticipate considerable difficulty in most cases and automatic rejection by some schools (p. 10).

More recently, the AAMC (1980:21) has revised its statement regarding admission by age, as follows:

Medical schools review the applications of candidates without regard to their chronological age. Experience demonstrates, however, that graduating seniors applying for the first time have the highest acceptance rate (49 percent according to the most recent data). . . . Before preparing to apply to medical school, however, older applicants, particularly, should seek counsel.

It is too soon to see the impact, if any, of this more recent statement on age as an admission criterion. We do know that the ages of applicants and acceptees has remained remarkably constant until 1980.⁴ Typically, medical students enter medical school directly after college, while they are in their early twenties, with little or no practical experience outside the academic setting. Medicine tends to draw its applicants from the middle class, particularly the middle and upper portions of that group (Doebler, 1967; Elam, 1973; Thorne, 1973). They are more often than not children of professionals. Students who come from professional families have a tendency to make their career decisions early and, aware of the difficulty of getting into medical school, structure their college courses to maximize admission (Rogoff, 1957; Elam, 1973). Chart 1, which follows, provides a summary of

Chart 1

Acceptance of Applicants by Age,
1971-72 through 1978-79 Entering Classes

Age at Matriculation	1971-72		1974-75		1976-77		1979-80	
	% of TA ^a	% of AA ^b	% of TA	% of AA	% of TA	% of AA	% of TA	% of AA
17 - 20	4	5	5	7	2	4	2	3
21 - 23	66	76	63	72	61	71	57	67
24 - 27	20	13	23	16	27	19	29	22
28 - 31	7	4	7	4	8	5	9	6
32 - 37	2	1	2	1	2	1	3	2
38 and over	*	*	*	*	*	*	*	*
Unknown	2	*	*	*	*	*	*	*
Total Number	29,172	12,335	42,624	15,066	42,155	15,774	36,141	16,894

* Less than 1 percent;

^a TA refers to total applicants;

^b AA refers to accepted applicants.

Sources: Dube et al (May 1973); Dube and Johnson (September 1974); Gordon and Johnson (September 1977); Gordon and Johnson (November 1978); AAMC (1981).

application and admissions activity for the 1971-72 through 1978-79 entering classes, with attention to age as a factor. It appears that, regarding age at matriculation, application and admission data have remained fairly constant despite considerable increases in the overall number of applicants and acceptees; the proportion of applicants under age twenty-eight varies between 89 and 90 percent; the proportion of acceptees, between 94 and 95 percent. There has been a slight increase in older acceptees since 1975. This age pattern is also reflected in the average age of applicants and acceptees, as demonstrated in Chart 2, which follows. The average age has remained at twenty-four years for applicants and twenty-three years for acceptees.

Chart 2

Average Age of Applicants and Acceptees, 1971-79

Entering Class	<u>Total</u>		<u>Women</u>		<u>Men</u>	
	<u>Applicants X Age</u>	<u>Acceptees X Age</u>	<u>Applicants X Age</u>	<u>Acceptees X Age</u>	<u>Applicants X Age</u>	<u>Acceptees X Age</u>
1971-72		65.6% between 21 and 23				
1972-73		61.4% between 21 and 23				
1973-74		62% between 21 and 23				
1974-75	23.8	22.8		22.5		22.8
1975-76	24.1	23.0	24.2	23.2	24.0	22.9
1976-77	24.2	23.0	24.3	23.3	24.1	22.9
1977-78	24.3	23.1	24.4	23.3	24.2	23.0
1978-79	23.9	23.2	24.2	23.6	23.8	23.1
1979-80	24.1	24.0	24.3	23.8	24.0	23.3

Sources: Dubé et al (May 1973); Dubé et al (September 1974); Dubé and Johnson (November 1975); Dubé and Johnson (November 1976); Gordon and Johnson (September 1977); Gordon and Johnson (November 1978); Gordon (September 1979); AAMC (1980, 1981).

Those who aspire to a career in medicine are not unaware that age is used as a selection criterion by medical schools. An examination of the selection factors stated by 118 medical schools in the United States in 1975 indicates that age is specifically mentioned by over 30 percent of the schools.⁵ Although a substantial proportion of schools have strong preferences with regard to the age of candidates, there have been relatively few accusations of discrimination because of age. Most of the real or threatened lawsuits against medical schools in recent years have pertained to racial or sexual bias. However, in the period 1971-74, there were five allegations with regard to age (Student Affairs Reporter, Winter 1974-75). More recently, in October 1978, there was a statement submitted to the Age Discrimination Study of the United States Commission on Civil Rights.

. . .no person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance (p. 2).

This statement has recently elicited comment by the Vice-President of the Association of American Medical Colleges, J. F. Sherman, regarding the older applicant to medical school. In an editorial appearing in the Journal of Medical Education (March, 1978:215-16), he states that while the "medical education community" supports a federal ban on unreasonable discrimination because of age, it does take into account "the intensity of the competition for the limited number of positions and the high level of effort and personal commitment that are required for success as a medical student and as a medical practitioner." He suggests that medical school faculties are provided with less latitude than the faculties of other programs in higher education

because of "the very high expectations society holds for men and women who achieve the MD degree."

The reasons for this attitude, as suggested by Sherman as well as the AAMC (1980), are several. (1) Older candidates, as a whole, have academic credentials (both college grades and MCAT scores) which are below those of recent college graduates. Those who earned college degrees several years prior to medical school application are less likely to do well on this test and are believed to be less likely to be well prepared generally due to the rapid advances in knowledge, particularly in the sciences (Gordon, 1979). (2) Older applicants have a longer life history on which to be evaluated. (3) Older applicants are less likely to complete medical education. The rigor and demands of medical education are thought to be too severe. (4) Those who are perceived to aspire to medicine because they have failed to achieve in their initial career or who place too much value on the potential economic advantage of medicine are less likely to gain admission. (5) Medicine must be studied on a full-time basis, thus creating financial and familial burdens for older students. (6) There is believed to be lowered productivity due to a shortened professional lifespan.

The existing literature regarding age as it relates to the career choice of medicine is scanty, and rarely treats age as a primary research variable. That which does exist deals with some of the proposed arguments against older recruits. Emphasis has been placed on the influence of age as it relates to success in medical school. This has been one of the foremost arguments used for limiting the acceptance of older students into medical school, although the data remain weak and inconclusive (Morris and Miller, 1954). There is some evidence

that older age at entrance is related to higher attrition rates in medical school. Johnson and Hutchins (1966) found that total attrition rises from a 5 percent rate for entrants age twenty or younger to a 40 percent rate for students who were forty years or older at time of matriculation. When academic and nonacademic attrition rates were compared, the same general relationship was evident. It should be noted that approximately 70 percent of all attrition occurs during the first year of medical school.

Dropout rates are lowest for students with only three years of college or a B.A. degree. Highest rates are for those few students with Master's degrees other than the M.A. or M.S., and for students with a Ph.D. or other doctoral degree prior to starting the study of medicine. The authors suggest that the advanced degree students, however, often make unique contributions to the field of medicine which may well outweigh the slightly higher attrition risk presented (Johnson and Hutchins, 1966).

One explanation suggests that the higher dropout rate for older students is due to the social problems of marriage and children "in a system which is rigid and unimaginative" in its provision for the personal lives of doctors. If this were corrected, the dropout rate might be lessened (Hart, 1974:1193). Evidence of the effect of a supportive system for older students is provided by the [formerly Women's] Medical College of Pennsylvania. It appears that women more often than men may defer their decision to study medicine, perhaps until the home-child situation begins to run smoothly. With this in mind, the Medical College had maintained an open-door policy for older students. The desire of most American women to receive their medical education

with men has until quite recently hindered this college from attracting first-rate applicants. Except for a small minority of women who could have qualified for entrance into one of the coed medical schools, but preferred the Medical College, this school has found itself often left with late deciders or older women. But interestingly, because of the encouraging atmosphere, the attrition rate among these older women is not noticeably higher than among the younger ones (Lopate, 1968).

Another possible explanation for attrition may be related to the commitment to medicine. One study (Anderson, 1967) reveals that the commitment to pursue medicine seems to be related to the age at which the individual first considered it as a career. Early deciders appeared to be more secure in their choice of medicine as the best possible career choice (Rogoff, 1957; Riches, 1967), or as the only choice that could satisfy them. For those who shift their choice, medicine appears to have been only one of several satisfying fields (Anderson, 1967).

The area in which age as a factor in pursuing a medical career has perhaps its most severe implications is in terms of the projected number of years of productivity. It has been speculated that the older matriculant may have fewer productive years as a practicing physician. This becomes an important factor to medical schools in the process of selecting candidates, particularly when the cost of educating a physician is considered. According to Jussim and Muller (1975), the total cost of education and support over an eight-year period is \$146,432. It becomes necessary, then, from the point of view of medical schools, to obtain maximum productivity for this investment. In a study of women physicians, Jussim and Muller found that women are two-fifths as

productive as men in terms of time devoted to practice, and therefore, more costly to produce. They suggest that the quality of care delivered, however, by women physicians may compensate for decreased productivity. In addition, it may also be suggested that women may be more "marginally valuable (in the economic sense)" in that they tend to enter specialties in which there are manpower shortages (Phelps, 1963: 924).

These arguments may prove to be applicable to older matriculants as well if it appears that they are in fact less productive in the course of their professional careers. Other reports indicate that the productivity of more recent women graduates is increasing. Williams (1978) examined practice patterns of women medical graduates by decade. Graduates from the 1930s and 1940s have practiced an average of thirty-three hours per week; those who graduated in the 1960s, forty-four hours per week. While the average work week for the female physicians appears to be increasing, that of many male physicians has steadily decreased by over 10 percent during the last decade. Reasons for the decreased work week of many male physicians are worth investigating, particularly in terms of any implications for older matriculants. One reason suggested is that certain of the prestigious specialties, such as surgery, may have become saturated in recent years, thus providing fewer working opportunities for those specialists. This has relevance for older matriculants, since it appears that age is a consideration in relation to career choice in terms of type of specialty and/or type of practice.

Perhaps older matriculants, because of their career choices, will require fewer years of postgraduate training, and thus begin their

years of practice sooner after graduation from medical school than the more typical graduate. This may be one way of compensating for their late start and may increase their productivity over their professional lifespan. Another argument in favor of older matriculants, which has not been systematically explored, is that with relatively good health and increased longevity, the older professional may remain professionally active long after official retirement (Shepphard, 1971). Data from the U.S. Bureau of the Census (1972) and the American Medical Association confirmed this argument. As of December 31, 1970, 12.3 percent of all physicians were sixty-five or older. Of these physicians, 71 percent were professionally active, which suggests that many physicians remain active even during their seventies (Reinhardt, 1975). Data from the 5th Periodic Survey of Physicians (Balfe et al., 1971) show that in 1969 the average number of years in practice for all physicians was just over twenty-four. General practitioners and surgeons had a greater average number of years than physicians in any other specialty.

Implications for Research

The issues of physician manpower, in terms of distribution and quality, seem to suggest a need to explore additional ways to meet our nation's demand. The preceding discussion has outlined some of the problems and solutions. One factor is evident: the prevailing homogeneity of those who aspire to medicine and those who pursue it. Given their similarity in those characteristics which precede their inclusion in the medical profession (for example, socioeconomic background, undergraduate major and grades, MCAT scores, etc.), and the intensity of the socialization which occurs during the medical school years, it is

likely that the physician population will continue to be similar in their career patterns, specifically specialty choice, location, and personal characteristics. If we wish to alter the composition of the medical profession to better meet our needs, then perhaps we must consider as one approach a different pool of medical recruits. This research will be concerned with one category of medical aspirants--those who pursue medicine at a later age. We will examine the decision to choose medicine at that time, and the outcome of that decision in terms of specialty choice and practice characteristics. Are older recruits likely to meet health manpower needs in ways not being met by the more traditional physicians?

Notes

¹The general use of the term "primary care" is new. Currently, primary care as defined by the Manpower Act of 1976 encompasses family medicine, general internal medicine, and general pediatrics. A primary care physician is usually the patient's first contact, and often the only physician seen. The primary care physician may serve as a source of referral to the "secondary care" physician, who is highly specialized in a subspecialty such as cardiology. This physician may also act as a source of referral to a "tertiary care" physician, who acts as a super-specialist, limiting the practice of medicine to limited techniques, parts of the body, or medical problems.

²The Manpower Act of 1976 states that if medical schools do not ensure that a certain percentage of graduates enter primary care, they will not receive their capitation grants. A certain percentage of students who need funds for medical education will be able to enlist in the National Health Service Corps. Three years after graduation they will give one year of service as a primary care physician in a medically deprived area for each year of support (Funkenstein, 1978).

³During the 1970s there were attempts by governmental agencies and medical schools to increase the numbers of women and minorities in medical schools, and therefore eventually their presence in the physician supply. Recent figures indicate some success. The year 1972 saw the largest increase ever recorded in women applicants and they comprised nearly 17 percent of all medical school entrants. This was a 35 percent increase over the previous year. Minority admissions increased by almost 11 percent, with Black Americans having the highest numeric increase and American Indians the highest percentage increase. The lengthy period of physician education means that it will be a number of years before these increases in minorities and women change the physician supply (Enos and Sultan, 1977).

⁴Data on age at application and admission has been available in aggregate form since 1971 from the Association of American Medical Colleges.

⁵Forty-two of the schools provide data on the range of accepted applicants and/or the mean or median age. The inclusive age range of these schools is eighteen to thirty-eight years. The mean or median ages stated are as follows: twenty-one years (five schools); twenty-two years (fourteen schools); and twenty-three years (sixteen schools). Some schools, instead of or in addition to data on the age of accepted students, provide a statement of policy toward older students. For some, age matters little or not at all, as illustrated by the following comments:

"No age limitations have been specified."

"No age limit is defined."

"Age is not a specific factor in selection."

"There is no maximum age restriction. However, most entering students are in their early twenties."

"The vast majority of entering first year students range in age between twenty-one and twenty-six. There is no strict upper age limit but it is rare that a candidate more than thirty years old is given serious consideration for admission. In such cases the candidate is truly a person of exceptional merit by academic and other criteria."

Finally, some schools refer not to age directly, but rather to academic considerations:

"In general, preference is given to applicants currently doing undergraduate studies or recently graduated from college over those who have established themselves in another professional career."

"Preference is given...to candidates who will be twenty-nine at the time of enrollment and to individuals whose decision to seek entrance to medical school does not involve abandoning an already established career."

"Applicants currently in a graduate or professional program are at a serious disadvantage."

"Individuals holding or working toward a doctoral degree are discouraged from applying."

Several other schools indicate that eligibility for admission would be determined without regard to race, color, sex, national origin, religious or political beliefs, or age. For the remaining schools, age is of varying importance. Some state specific age preferences:

"Applicants over age twenty-six are rarely admitted."

"Preference is given to applicants who are less than twenty-eight years old; chances of acceptance are unfavorable for candidates over age thirty."

"Age preference is twenty-one to twenty-six years."

"Applicants should normally be under thirty years of age."

"...rarely is a student over age twenty-nine accepted."

"Age is of some consequence; the preferred range is from nineteen to twenty-five years."

"Age preference is nineteen to twenty-six years of age."

"Preference is given to applicants under thirty years of age."

Some schools add additional specifications to the age consideration:

"Preference will be given to applicants who are no more than thirty years of age at the time of application and who have sufficient recent academic activity to demonstrate the potential for successful completion of the rigorous educational program in medical school."

"While there is no upper age restriction few candidates over age twenty-eight have been accepted and only then when they have demonstrated exceptional motivation and academic achievement."

"Although there are no age limits, very young and relatively older applicants must demonstrate considerable strength in other aspects of their application."

"While there is no arbitrary upper age limit for applicants, candidates over age thirty are not encouraged to apply unless they have made significant achievements in a field closely allied to medicine and require a medical degree in order to extend and apply their work to a clinically related area."

"Students over age thirty will be seriously considered only when their interim experience will contribute to their professional goal and give them a unique role in medicine."

"Although there are no age restrictions applicants over age twenty-eight must demonstrate some unusual or desirable qualifications for the study of medicine."

Sometimes, age specifications of successful applicants are stated:

"There is no specified age beyond which an applicant is disqualified. However, very few applicants over the age of thirty are successful."

Chapter 3

Early Career Goals and Choices

Although the active pursuit of a medical career for late matriculants appears not to begin until at least the mid- to late twenties for virtually all our respondents, the career decision process must account for prior age experiences. We know that none matriculated in medical school earlier than age twenty-eight and many were in their thirties and forties. What events preceded this? What are the backgrounds of those whose medical careers are delayed?

The literature is replete with information on the typical medical recruit, who decides in high school, or before, or early in college to become a physician and then takes the necessary steps to begin medical school immediately after college graduation. The rigor of premedical studies and the long and costly medical training is believed both to cause early decision and to result in making the typical recruit likely to come from an advantaged background.

We are faced, however, with a relative dearth of information on the older recruit. If there is such an association between one's social background and the traditional route into medicine, is there something in the childhood or early adulthood of older recruits to preclude an earlier start or, perhaps, to foster a later one?

Factors Affecting Early Career Goals

It is striking that most of our respondents don't recall ever

thinking about medicine "while growing up": "It never occurred to me that it was available to me. No one ever suggested it," said one. [Emphasis by respondent] And another, "This was not something that came up terribly consciously. It just never was an option that was considered." And later, while in high school, vague thoughts about medicine were dismissed as "a passing fancy," "a passing thought," or were "put aside." In a few cases, however, respondents do remember a very early desire to become a doctor. One of the oldest medical recruits said that he knew he "always wanted medicine":

I thought about medicine as a child. I had a penchant for medical articles, even if they were beyond me. I would read them anyway. And, I just enjoyed it. I used to always think how wonderful it would be to take care of people. [1]

To some extent, the special experience of women must be included in the interpretation of these data. Remembering that our interview subjects grew up under conditions that generally discouraged women from careers in medicine, the following testimony is more understandable. The respondent, a female, enjoyed reading about medicine. She reports a typical childhood encounter with the "forbidden" parts of a discovered book, but going on to become fascinated by its substance:

I remember being quite a bit younger. I'd say, somewhere around eight. I remember reading an old home medical encyclopedia. It was written somewhere in the early 1900s. I was reading with some friends and we read all the dirty parts like what to do on your wedding night. But after my friends left, I sat down and read the entire rest of the book. And it's a pretty massive volume, too, because I found a copy of the damn thing. But, you know, I was always fascinated with that kind of thing as far back as I can remember. [48]

But she adds:

How I got the word somewhere along the line that that was not something I could do, I really don't know.

The message was clear to other respondents as well. Both those

few who did think of medicine in childhood, and those who never considered it, somehow went on to pursue other interests.

By and large, they were a very bright group. Their performance in high school was above average. One woman described herself as a "professional student," another as "an overachiever." Others indicated that they "did well in everything" or "were interested in everything." For the most part, their success was the result of hard work. "I studied a lot. I always did more elaborate work than was expected of me," said one respondent. Only an occasional respondent described "difficulty" during high school, and then one gets the impression it was lack of effort rather than lack of ability that was responsible.

Particularly notable is the preference for math and/or science among our respondents during their early years. Even those who expressed a liking for "most subjects," singled out math, science, or both as major interests. In fact, a few students attended special science-oriented public high schools, which required an examination for admission, in lieu of the regular public school system. Generally, these schools were considered "prestigious," and, according to one graduate, ". . . had the cream of the intellectual crop of teenagers."

Despite this apparent early interest in science, however, we see that medicine was not realistically thought of as a career option at that time. Rather, early career goals of those with an inclination toward science were channeled into vague notions of engineering, pharmacy, veterinary medicine, research or academic science, and nursing. Most deferred specific career choices until college, or after. For instance, one woman talked about her pre-college years:

I had a lot of very vague, grandiose ideas about a career. I

never thought about anything specifically. . . . I don't remember thinking about a specific profession. . . . I don't think I was thinking about the future. I was thinking about going to a good college. That is all I cared about. [48]

A male respondent was somewhat more focused, but still unclear as to his future plans:

I didn't want liberal arts or just a bachelor of arts because to my way of thinking at that time, it would not lead to anything specific. I was not aware of the business world at that time or what was available to me. I didn't receive any counseling or guidance in any way. [38]

It appears from discussions with respondents regarding the decision to attend college that attitudes and behavior were very much related to life circumstances at the time. In particular, two issues stand out: the socioeconomic background and the role of women in society.

Socioeconomic Background

In terms of socioeconomic background, as indicated by father's occupation, older matriculants to medicine seem to differ from the stereotypical medical recruit. One of the most consistent findings in the literature on medical education and the medical profession is the relatively high socioeconomic background of medical recruits (using father's occupation, income, and/or education as indicators). Although there have been recent efforts to increase the proportion of minority members, it appears that ". . . medicine will remain disproportionately . . . upper middle class in its recruitment for a long time to come" (Mechanic, 1978:379). For instance, the majority of applicants to the 1976-77 entering class (58.9 percent) had fathers who were in the professions (including physicians), or were owners, managers, or administrators (Gordon and Johnson, 1978). This proportion has remained

fairly constant, at least since the early 1950s, and is considerably higher than the comparable figure for employed adult males in the United States (Smith and Crocker, 1971; Gee and Glaser, 1958; Bloom, 1973). Applicants from higher socioeconomic backgrounds are more likely to be accepted to medical school, as well. For the 1976-77 class, such applicants had a 40 percent acceptance rate compared with a 33 percent rate for all others (Gordon and Johnson, 1978).

Of particular interest is the high proportion of medical applicants and students whose fathers (or mothers) are physicians. In 1964, 14 percent of all medical students were children of physicians (Smith and Crocker, 1971). The figure remains essentially the same today (Coombs, 1978). This is considerably more than would be expected on the basis of random sampling from the general population.

The AMA data do not provide information on the parental background of older matriculants. We must rely solely on the interview data, which are at best suggestive due to the informal sampling procedure and the small number of cases. With these limitations in mind, we note that our older matriculants are less likely than the typical recruits to come from higher socioeconomic backgrounds, using father's occupation as an indicator. Only one-fourth of respondents had fathers who could be described as professionals, including pharmacists, chemists, attorneys, and clergy. Only two respondents had fathers who were physicians. And an additional 10 percent had fathers who could be classified as managers, administrators, or small business owners. The rest--more than half--were in various skilled or unskilled occupations, including carpentry, bartending, truck-driving. Several respondents were brought up by their mothers alone due to the death of the father, or divorce.

For the most part, though, mothers could be described as homemakers, at least during the childhood and adolescence of our respondents.

It seems, therefore, that older matriculants, more typically than the younger recruits, grew up in homes that were lower middle class or working class. Such a background is more likely to thwart or stifle the desire for higher education in general and, as we will see, for medicine in particular. For instance, one respondent recognized early that he wanted "something better" for himself than the "way he was brought up," but he had "no idea what education was about" and "no direction." To illustrate the extent of his cultural deprivation, he remarks:

The literature in my house consisted of the Sunday News--not even the Daily News--just the Sunday News! [17]

Parents from such homes were also likely to be disinterested in education, as explained by another respondent:

. . . it was a dilemma for me because I come from a background of lower middle class parents of foreign birth who did not push me despite the stereotype of the parents from Eastern Europe pushing their kids into professions and pushing their kids into college. My parents didn't. It was almost a disappointing lack of interest in my intellectual performance and my intellectual attainment. Actually, if I had not gone to college it would have been within the family norm. And so I received no particular encouragement from my family. [41]

Still another blames not only her family but the school system in her neighborhood:

I always said I was going to college. I came from a lower middle class family and there was never any emphasis on education. I think I said I wanted to go more because everybody in school said they were going. I never really gave any thought to it. . . . I didn't have a very good school system that would encourage me. I was a relatively good student throughout most of high school, and I think they probably should have encouraged me to go to college, but they didn't. [45]

The emphasis in these families was often on obtaining a

respectable "white collar" position, with security, such as in a bank.

One male respondent in particular was pushed in this direction:

I know they didn't want me to go to college. . . . My mother's brother, he went to private grammar school, private Catholic high school, and then he went to [a public university]. He had everything handed to him . . . and none of it ever paid off. . . . And because of that, college became--don't even mention it in the house. . . . They were very adamant. They didn't want me to go to college. They wanted me to go to work. Get a good job at a bank. You wear a white shirt, you type, you know. [141]

Compounding and perhaps contributing to such parental indifference or opposition to college attendance were the more concrete financial constraints. Simply, many parents could not afford to send their children to college:

When it came to going to college, my father made it quite clear that he couldn't or wouldn't support my going to [a private Ivy League school]. He felt I could go to City University because at that time there was no tuition. But I wanted to go to [a private Ivy League school], and in order to do so I had to work because I received no other scholarship aid.

For many others, however, a tuition-free school became the only option:

. . . I came from Europe. . . . We didn't have very much money, so it was sort of understood that my brother would be going to college. He was three years older than me and I may go, depending on how things worked out. They always wanted me to take an academic course, to always have my doors open. . . . And what happened was that I wasn't going because we were always under the impression that to go to college in the United States is expensive. You can't go for free, you had to pay. My parents could not afford both of us. . . . And I was sitting in homeroom one time, and heard some kids say there is this free school. And my ears just perked up. It was Monday and that Friday we were taking admissions exams. . . . And I just heard it and I applied. [221]

For whatever reason, these students weren't aware of financial aid, or had misleading information. According to one respondent, ". . . the word was if you applied for scholarships your chances of being admitted were diminished." Another respondent also went to a free school

because of financial constraints. "I wasn't aware of the fact that someone with my average could have gotten a scholarship anywhere. I just never looked into it."

Other students, with access to the appropriate information, depended on scholarships, schools with "good financial aid," or "those which were cheaper":

I selected [a top Eastern university] because it gave me the biggest scholarship of any place that I applied to. They gave me a full scholarship plus support money, which back then was a big deal. Certainly, for me, I couldn't go anywhere without a full scholarship. [25]

Financial problems, however, forced some others to postpone college. A woman, who grew up in the South, had the opportunity to attend a private residential high school as part of a special recruitment program for minority students, but was left to her own devices for college:

It was a matter of money because I left the South and came back up [to Philadelphia]. And people who had gone to school in Philadelphia--a lot of them had scholarships, but I didn't have any. There was a matter of funds available. So, it was a matter of working to try to get some money to go to school. [20]

It wasn't until at least ten years later--after a marriage, four children, and a divorce--that this woman was able to begin college on a full-time basis. She had tried before then to combine work and school, but with difficulty:

I remember working as a cashier, mostly as a clerk, because even though I had taken some typing in high school, there weren't too many jobs open at all. I started to go to school in the evening to take a secretarial course to get a better job. . . . For a while I tried working and going to college . . . and it just got a little difficult so I decided I had to do one or the other. I was working and it was very difficult to save enough money and that didn't work. I eventually got married and started raising a family. But I guess I never stopped thinking about it.

A woman with similar financial problems attempted to work and attend

school simultaneously. She too found it difficult. Eventually, she managed to attend full-time--but also only after a marriage and divorce.

Another student, originally from Ecuador, came to the United States to help put his sister through college "because [his] parents did not have the resources." In turn, she would help him; they would take turns working and going to school. First, however, they had to attend special programs to learn English:

. . . so we did that for a year and then we ran into economic problems. Even though I was working as much overtime as I could [in a factory], the money I was making was not enough to maintain the tuition of her schooling. . . . So we both had to start working again to save our money. [31]

Without direct support or guidance from parents or schools, respondents were pretty much on their own regarding decisions about college. This was particularly difficult for some who described themselves as "young" at that time, or "immature," or "naive." This occasionally influenced the location of the school attended. One man, for example, whose parents were not completely in favor of his attending college, remarked:

I don't think I had the courage to go to an out-of-town school. .
[The decision to go] was already a big step for me.

He ended up in an Ivy League school near his home, which he described as "the ghetto boy's exit without going too far." And he did this with "no encouragement," in fact "discouragement," from his family.

In another situation, a young woman was forced to attend a nearby school because her parents "would not allow" her to go away:

My father was born in Ireland. My mother's parents were born in Ireland. And essentially they believed that children live with their parents until they get married. In the Irish culture, that can be forty-five, fifty, seventy-five! [33]

One student, who did "persuade" her parents to send her away to school, limited her choice to "an Eastern girls' college" which was "the smallest" and "not in a city" because, she said, "I was too scared to go to a big city."

Most, however, did not express a preference for going away to school. Nearly all respondents, having been born and reared in New York City, continued their education in the metropolitan area. Overall, the most significant factor affecting the choice of a college was finances.

Role of Women in Society

Most of our respondents were born in the late 1930s and early 1940s, well before the women's movement had an impact on medical school admissions. In the late 1950s and 1960s, when our respondents would have been eligible for medical school at the traditional age, less than one-tenth of applicants and acceptees were women. Medicine, in particular, and careers, in general, were not encouraged for women. Rather, college was a means to an end, that is, something to fill time until marriage and a family. The prevailing attitude is described by a female respondent:

At that time, I remember, freshman year in college--Betty Freidan published her book and Simone de Beauvoir published her book and we were all busy reading these books in our rooms. But times hadn't changed yet. It was very important to get pinned or married soon after college. . . . My mother wanted me to go to college so that I would have something to fall back on. I wanted to go to college to get educated. [48]

Hence, college was perceived as a desirable goal for women, but without clear-cut career implications. For example, one woman who decided not to attend college became an actress and model instead. Her parents

tried to "discourage" this choice, preferring that she attend college. But, she explained, "not for anything in particular. It was just a normal progression." Another woman said it was "expected" that she go to college "since [she] was five years old." But, beyond such general expectations, there was little input on the part of parents in terms of specific career goals: "There was no discussion. Nobody sat me down and said, 'What are you going to do with your life?' It was assumed that I would just do something. . . ."

Some parents were, in fact, rather apathetic about the prospect of college for their daughters. One respondent said she "didn't feel encouraged in one direction or the other." Another doesn't remember her decision to go to college "literally being supported" by her parents. Rather, "it was OK with them." Another describes her parents as "just neutral." The decision to go to college, she said, "was totally mine."

One woman feels that she has "suffered" because "there was no real direction" from her parents. She explains:

I think one of the problems that I had and that I see now, all of my sisters also have--my parents for some unknown reason, it doesn't seem they laid out any expectations in particular at all. We were just being brought up good, proper kids and we were going to college. And beyond that it was kind of up to you . . . there was no real career orientation in my family. And there was no real family orientation, although given the environment of family, that was sort of what one grew up thinking was the norm, to have a family. [9]

She feels that the "floundering around" she did prior to her commitment to medicine was because "no one had ever pushed [her] in any one way" so that she could "either do it or rebel against it." "It just seemed like the choices were endless as to what I could do. And it was very, very upsetting," she said.

Most of the women did opt for college immediately after high school, despite lack of strong parental encouragement. It seemed a reasonable choice, if for no other reason than to meet a potential husband:

To go to college was important. I remember when my sister, who is just four years older than I, graduated from high school and was going to college. I remember we went out for dinner and a friend of the family came up to congratulate my sister on her graduation and asked why she was going to college, and she said, 'To get a better class of husband.' And that was, I think, in my family why women went to college. . . . It was certainly important to my folks that we went to college, but not that we had careers. [10]

The women learned early that having a career was secondary to the "traditional" role of wife and mother. Working was seen as a temporary state, either before marriage or after the children were of school age. Consequently, some women never thought of themselves as having a career.

A few never even considered college:

I grew up on a farm. The idea of even graduating from college never entered my mind when I was in high school. I assumed I would get married and have a family--like everybody else I knew. [44]

After working for a year in a music store, this woman decided to try college. She enrolled in a "small church-related" school where she ". . . expected to go for one year and meet a husband," she explained laughingly.

It is not surprising that so many respondents felt this way. After all, the only role models they had were the women around them, notably their mothers. One woman talks about this:

I envisioned that I would get married. . . . It was very clear to me that I would also go to college. I had no career goals. That I eventually would get married. I would continue as my mother had done and things would be done just as I had seen them done around me. And it's funny, because growing up in the late 1960s--well, actually early '60s and late '50s--there was no role model of

women who were professional women or who worked. My mother didn't work. [21]

Another woman talked about her experience:

I never really thought very much about what I was doing in the future. I took the route that most of my aunts had taken and even many of my cousins. And that was, I went to secretarial school. I think I was more or less biding my time until I was going to get married. [45]

Our respondents, therefore, experienced indirect pressure to opt for marriage and a family rather than careers, simply as a consequence of the women they knew. There were also more overt pressures, as described by one woman:

When I wasn't married by twenty-one, my mother sat me down. This was a very serious situation. 'You have no prospects.' And she knew I had met every Christian man in [my community], and she said, 'How about a Jewish man? They're not faithful but they are very good providers.' She wanted me to get married. [Emphasis by respondent] [33]

This woman learned early not to be ambitious, as did some others:

. . . [My mother] didn't like my being competitive. There was a spelling bee in school. There were two people up. She told me to spell the word wrong. . . . She felt it was too much, too much work, too much tension. Why should I have to do this? Let somebody else go through this.

Another woman, as a child, decided she wanted to be a veterinarian.

But she soon learned it wasn't an appropriate goal:

. . . what I seem to think happened is that as long as I was sort of pre-adolescent, from my parents' point of view, that whatever I wanted was fine, and they at least tolerated it if not encouraged it. . . . Obviously I was quite a tomboy. I think when I hit adolescence my folks started getting worried about me, thinking that I wasn't going to turn into the perfect lady like my sister. . . . And when I would talk about wanting to be a veterinarian, for instance, they would point out, plus in high school my counselors pointed out to me, that to be a vet you had to go to college and it was so many years after college and it wasn't really woman's work and why would I want to spend all those years getting an education that I would never use. Why would I never use it? Well, because I would get married and have children. You know, the real traditional story line. Which I think I got fairly strong. [10]

She changed her mind about her career goal as she "was buying more and

more into what was sort of the prevailing standard." Eventually, she said, "I bought into it totally."

Another woman, while still in high school, decided to abandon her original goal of becoming a math teacher. However, she received little help in choosing another occupation:

Well, I was fifteen and about to make decisions about applying to colleges and I felt that I should be preparing myself for something and that I would like to know what I was preparing myself for. My ambition--my life ambition--had suddenly become much less attractive to me and I was looking for something else to substitute. It was frustrating because I got no help or encouragement at all. [33]

She managed to attend a vocational interview at "the biggest chemical company around" where she was discouraged from choosing chemistry as a career:

We went to talk to a chemist at [a major company], who told us that if we were interested in chemistry he certainly encouraged girls and boys to major in chemistry in college. But not to expect to go anywhere professionally in chemistry because their hiring policy was that women were secretaries, that they were professionally undependable, and that we shouldn't come around with our new chemistry degrees applying for a job. Because we would be secretaries.

These pressures to conform to the traditional role of wife and mother created a feeling that if one also desired a career, one must choose between the two. Again, the available role models reinforced the prevailing expectation:

. . . the professors that I knew at [collegel] were women who were all unmarried. They were lovely people. They were the last of that feminist generation. But it was very clear who they were--that they had chosen not to have families. They didn't feel they could do both. [48]

Some women, however, could not see themselves in the traditional role. One said, "There was always a part of me that said, No!" Another was also torn between a family and a career:

I mostly--I was struggling with how on earth--I knew I didn't want to be like my mother. I didn't want to stay home. . . . I had

always wanted a career. But I think I was terrified that I couldn't. I didn't know how to go about it. I had never known or met a woman who worked and had children. I always wanted children. I can't remember a time when I didn't want children. That was real important. [48]

Yet, even when she did meet someone who managed a career and family, this respondent couldn't envision herself in that way:

I remember one quiet girl in my class who knew exactly what she wanted and she got it. She wanted to get a Ph.D. in economics and she wanted to get married afterwards, and have children. And I always wondered how she got that sense of strength and direction, or lack of conflict about family versus work.

A few women seemingly avoided the conflict between work and family by not dealing with the issue. One woman remarked: "I never had marriage and family in mind. But I don't know if I had career in mind, either."

A few others would allow fate to decide:

. . . there were kind of three alternatives, no one of which was very clear to me. One alternative was to go to graduate school. Another alternative was going out and getting a job. And the third alternative for, I suppose, most girls graduating in 1962, was getting married and settling down and being a housewife. I didn't have any prospects of getting married, but it would have been nice because if I had prospects I might have said yes and done it. [40]

As it turns out, she opted for graduate school as did another woman who was somewhat more career-oriented:

. . . I had been programmed subconsciously to always know that I would have a career. It is very interesting that I never had been a person who didn't go out. I had boyfriends and yet I always assumed that I would not marry. Or, I assumed that I would marry for friendship at age forty and therefore the children issue would be taken care of by default. [7]

And now, as she finds herself "approaching that age," she has become romantically involved with a man, but remains conflicted:

. . . That is not what was supposed to happen. I was supposed to meet Prince Charming five years from now when it is too late and I wouldn't have to deal with any of these things.

For women who clearly did want to work, only two occupations seemed to be encouraged--teaching and nursing.

The rationale behind teaching as a desirable career was explained by one respondent:

. . . I kept hearing, which was a real common refrain, that was how --in the early '60s, in terms of what was a woman doing in college anyhow--was how helpful it was to have an education degree because what were you going to do when you were thirty-five and your husband dropped dead of a heart attack and left you with four kids. It was always something you could fall back on. Women, in that generation, seemed to spend their whole life acquiring things they could fall back on. [10]

Several women spoke of the pressure they felt to become teachers:

Although it wasn't overt in my family to say I must do this, I must do that, it was inherent clearly that I would have a family. . . . And I guess teaching was so much the thing for women to do. I think I incorporated that feeling. [18]

Another was similarly socialized:

I don't think women in my generation, unless they came from families where their mothers had professions, had an opportunity at all to form any realistic career plans unless they were going to be teachers. [48]

It is interesting that although many women felt the pressure to teach, only one mentioned a desire to become a teacher:

I was a very good student all around. I was particularly interested in math and science, chemistry, physics and biology. And I, from early childhood, had wanted to be a math teacher. [1]

Yet, during her second year in high school, she began to have some doubts:

. . . I began to realize the repetitive acts of teaching. I had originally been thinking of elementary teaching as a child, and then when I was in high school I was interested in math and thinking of high school math until I realized the unsatisfying aspects of having to teach so many children who are not particularly interested. . . .

And she began college no longer wishing to teach, but without any other goal, creating a difficult situation:

In the middle of the first semester, I decided I really was not very happy there. I still was very much without any direction and . . . I decided I would not go back the following year.

After another attempt at college, she eventually left for good.

Another woman, who did obtain a teaching degree, quickly became dissatisfied with it:

I graduated from college and taught Headstart. It was the first year of Headstart. It was 1965. I did that for the summer and taught first grade . . . the following year. I realized that was not what I wanted to do, not at that point in my life. For one thing, I was being kept in the suburbs to teach. I was associating with other teachers who were married in the suburbs or single. And older. And, the parents of first grade children. And it really didn't provide enough of an outlet for me. So that was one factor. Another factor was that I felt my own background at that point wasn't broad enough for me to give to these kids. It was a really important experience for them. If I were to do this, I should fulfill myself a little more. To do the job right. I didn't feel I was mature enough, really, to take on the responsibility. [33]

This was probably because the decision to teach was not entirely hers to begin with. This woman clearly was a victim of parental pressure:

My parents assumed I would go to college. Neither of them had gone and my father always wanted to be a teacher back in Ireland. He wanted his children to have good educations. . . . My parents thought I would be a teacher. So, we looked over the catalogue and we decided I was going to be a teacher [laughing]. It seemed like a good idea at the time. So, I decided on early childhood education. [Emphasis by respondent]

Nursing was recommended for our women respondents under those circumstances which, for men, would more likely lead to medicine, especially when they showed an early interest in science. Each of the five women who were nurses mentioned a preference for science, particularly biology. While most of those who became nurses typically experienced the pressure from family and teachers, one woman decided very early, apparently on her own, that nursing was her desire:

It was something that I always wanted to do. I always wanted to work with people. It was something I always declared to everybody I was going to do when I grew up. [29]

Another woman, however, made her choice in part as a result of pressure from others. From her parents, she got "little nursing kits at Christmas." Later, this was reinforced in school:

I guess I was in about eleventh grade and had an appointment to see the guidance counselor. When my turn came up, even though I was on the Dean's list, and I liked science, she suggested right away, "Well, nursing school." And specifically, L.P.N. school. [5]

It seems she was steered toward becoming a licensed practical nurse (L.P.N.) rather than a registered nurse (R.N.) because "it was the times. That's what most Black females in the school were geared towards." However, some family friends "who were R.N.s" encouraged her to "go to a four-year nursing school" to get a Bachelor of Science degree.

Another woman, who decided while in junior high school to become a nurse, was, to her surprise, discouraged by her eighth-grade science teacher from pursuing it. She was told: "You don't want to be a nurse." And, she recalls, "I did not understand it. He thought I was too smart." But he didn't give her any other options, either. She retained her interest in nursing because she "didn't exactly know what to do with [his] information," and she "didn't ask anybody else." While still in junior high school she wrote for some brochures from the Navy Nurse Corps "that looked very glamorous and . . . sort of reinforced [her] attraction toward nursing." Later on, in high school, she "did very well academically" but again was not encouraged by her guidance counselor to pursue other areas. He "just asked me what I wanted to do and I told him and he said OK."

From our interviews, several patterns of career decision emerge for late starters in medicine. Some are general; others focus on women. Overall, a lower socioeconomic background than most medical

recruits was a specific deterrent for these respondents. Their home environments did not nurture intellectual development nor the motivation to compete for hard-to-get educational rewards; both are endemic to most medical recruits. In these cases, neither parents nor teachers encouraged a medical career, in spite of evident signs of interest and capability. For women, the signs that normally lead teachers and parents to urge the choice of medicine were used instead to recommend nursing. In general, these women had almost no role models, and experienced both indirect and direct pressure against selecting any serious career, especially a time-demanding and difficult profession like medicine.

Preparation for a Career

Undergraduate Education

In spite of the special obstacles caused by lower socioeconomic status and, for women, by social values against medicine as a career, our respondents, even at a young age, were by and large a resolute group. Nearly all decided to attend college, despite financial and/or social constraints. Most progressed normally, matriculating just after high school and graduating within the prescribed four years. A substantial minority, however--about one-fourth--took a less traditional route.

One student, in particular, decided he would not attend college. Instead, he enlisted in the Army. In part, his decision hinged on his academic performance, which he felt "was not the greatest" and would prevent him from "getting into a good school." But it appears that a lack of direction was in some way responsible for his poor academic standing:

. . . high school really came hard for me because I was probably

more interested in extracurricular activities. I really wasn't motivated. I had no future thoughts about entering college at the time I went to high school. I really wasn't quite sure what I wanted to do with my life. I was very unsettled and I think I just wanted to get away and find myself. [39]

However, it was during his military training that he became committed to the idea of college:

I liked the Army, but then I realized I traveled extensively and saw people in different walks of life. And also, I felt I was a little bit above the others. If you had a high school education back in 1961, you were way above the military recruit, and so I was considered one of the brighter soldiers and was given a lot of responsibility. So I felt that I had the potential for doing better. And, as the years went on, I just became a little more motivated and I felt I wanted to try to achieve a little higher goal than staying in the Army.

Another respondent's original intention to attend college was thwarted after he was expelled from a private high school in his senior year because of a Halloween prank. He ended up in the military where he received his high school equivalency diploma. He still had "no doubt" that he eventually "was going to college."

Others who delayed entering college until their late twenties or early thirties include women who chose nursing, secretarial work or modeling as careers after high school, as well as those who chose marriage and a family. In addition, there were some for whom college was financially not feasible until later.

While some respondents delayed attending college, a few others made an effort to attend directly after high school with the expectation of graduating. Once there, however, they found a need to take some time off from school. Several took more than one leave of absence, returning each time hoping to succeed. But somehow they just couldn't force themselves to stay. Primarily, they lacked a clear idea of what they wanted, making it difficult to commit themselves to the demands

of college: "I didn't dislike school, but I didn't have any clear idea of what to do afterwards or what I was even doing there. I majored in about ninety different things." Another respondent remarked:

. . . I stayed there for a year, but in the middle of my first semester, I decided I really wasn't happy there. I still was very much without any direction. At that time there was a tremendous number of required courses and the atmosphere there was extremely competitive, which I didn't like at all. [1]

This respondent left college and returned to it two times before she realized "there was no point in continuing to do that, getting so little out of it." She later attempted to pursue engineering, but again was unsuccessful. In all, it took her ten years to complete her Bachelor of Arts degree.

The expectation to complete college and the inability to do so created conflict and self-doubt for some of these students: "I knew it was me. I was a terrible person. Good for nothing. Would never amount to anything, so why keep tormenting myself about it." Generally, it seemed to be the lack of direction rather than lack of academic ability which caused the problem. But often the two factors were interrelated, as illustrated by the following remark: "I think I just didn't know what I was doing there. I'd go to college but I wouldn't study. I felt there was no point in being there. I was totally lacking in focus and direction." Thus academic performance was affected by personal feelings of ambivalence toward college. In two cases, students "flunked out" during their first year. One young man began college with the intention of majoring in pre-engineering, but became less directed as time progressed:

I wasn't quite sure where I was going. Obviously, with my grades,

I wasn't that concerned about it. I spent most of my time either at the track, or playing poker, or screwing around. I would sometimes read the book before a final. Sometimes, I would just go into a final and see if I could bluff my way through it, which didn't seem to go over too well. [27]

This student was permitted to attend school in the evening as a "non-matriculant" until he could meet the minimum academic requirements. However, the Dean of Students advised him to relinquish his interest in engineering. He ultimately chose "psychology, since it was the only B I had gotten in two and a half years!" he said. But upon graduation, he still wasn't quite sure what he wanted to do.

The other student who flunked out "because of trouble adjusting to academic demand," seemed to respond more positively. His grades improved markedly, so that he came "close to making Dean's list once or twice." This enabled him to reaffirm his earlier interest in pharmacy.

It appears, then, that a number of students experienced a somewhat erratic undergraduate education, with interruptions prior to the successful completion of a Bachelor's degree. But even those who ostensibly progressed through college in the traditional way--four consecutive years, beginning immediately after high school--were by no means immune to the pressures, both academic and emotional, of college life. As we examine our respondents' attitudes regarding college and the future, it is surprising that so many of them did persevere. Indeed, for many, college involved "a great deal of psychological pain":

Well, those were the times--when I was in college, '51 to '55--when you didn't take a year off, you didn't drop out, especially from a working class background. Even though I was using my own money, so to speak, there was a pressure to go along with the program--the track. The track was, you did four years of college and you did something with it. There was tremendous pressure on me, and probably on a lot of my peers, of "What are you going to do when you get out of college? My God, you've got this education, what are you going to do with it?" [41]

Clearly, this was a question that plagued all our respondents. What differentiates among them is that some realized early (either after high school or during the first year or so of college) that they simply had no answer to the question. And so they delayed attending college until they were more realistically motivated, or they dropped out when their expectations did not seem realistic. The others persisted through the four years, despite indifference, apathy, and ambivalence. It was the rare student who entered college with a specific career or objective in mind. As we have seen in a previous section, respondents received little encouragement or support from family or school officials regarding the significance of a college education. The attitude, according to one respondent, was: "What else are you going to do if you don't go to college?" So, he said, "I sort of felt like it was the only thing to do."

Students without a clear direction favored a "broad," "liberal arts" education. They took "a lot of everything" or "learned a little about everything." This often involved changing one's major perhaps "four or five times" or choosing it "from term to term," sometimes by "a process of elimination" or "for lack of anything else." College regulations forced them eventually to designate one major and a minor area. It was this external pressure, rather than internal motivation or interest, that was largely responsible for the decision. Some simply chose the one subject "they liked best" or "did well in" or "had the most exposure to." This seemed the path of least resistance:

Freshman year they said you have to take one subject you have never had before. So I took psychology and said, 'Gee, that's fun and well, that looks nice and easy. I'll major in that.' I didn't want to get involved in anything that was very difficult. I think part of it was just that I didn't know who I was. I had too many other things on my mind at the time--just being concerned with

growing up--to have time to devote to something that would take a lot of energy. [13]

In most cases, decisions were made without regard for what would happen "beyond college," as one woman explains: "In those years we weren't worrying too much about what we would be doing. I think most people took what they liked." The students did not seem to grasp what it would mean to work: "I didn't know that much about what it took to have a career and make money. I grew up in a very cloistered setting. So the reality of work in any particular field didn't come across." Even those who managed to declare a major did not make an association between a college education and a career. In other words, there was little recognition of the practical implications of college. Often, a major area was selected without knowledge of job opportunities in the field. For example, one male respondent majored in physics "because it sounded nice." When the interviewer asked what he planned to do with it after college, he remarked: "I didn't think!" He switched his major to psychology, again without a specific goal. He said, "I wanted to be something called a psychologist. But I had no knowledge of what I really wanted to be. I thought I did."

This was not an isolated case. A woman recalls her decision to major in chemistry:

I liked chemistry, so I guess I felt I would be a chemist. Probably because I liked that the best of the sciences. . . . Chemistry was fun and I could do it and I was good at it. So, I thought I'd be a chemist. And I entered [college] with that in mind and I actually graduated in chemistry. [40]

But, when asked what she intended to do after college, she admits:

That's the sticky point in the whole thing. I recall that I was going to major in chemistry. I was going to be a chemist, but I don't think I had any idea about what chemists actually did, except work in laboratories.

Similarly, another woman decided early in college to major in physical anthropology, although she remarks, "I don't know why. It's probably the most obscure, and the least employable field, but I was attracted to it." One student who attempted "to do something [he] could get a job at after [he] finished undergraduate school" did so rather blindly: "I knew nothing about chemical engineering other than the fact it would allow me to work in chemistry after I graduated. I really had no idea what chemical engineers did."

An almost universal theme among our respondents, which continued throughout college, was the failure to plan for the years ahead. While many recognized that such choices were inevitable, there was a concomitant inability to make a commitment based on practical as well as realistic concerns. And graduation from college did not resolve these issues. Those who graduated within the prescribed four years, as well as those who delayed or interrupted their studies prior to graduation, were in a quandary as to what to do. Nearly all, more than four-fifths, decided to seek employment immediately after college; the rest opted for graduate school. But the manner in which they made these choices, that is, to work or continue school, and in which areas, reflects their earlier uncertainty and lack of clear identity.

Graduate Education

A small but notable number of respondents (15 percent) decided to go to graduate school directly after college. When we consider the lack of direction and often lack of motivation that they experienced during college, it is at first surprising that so many of them managed to commit themselves to further education. But upon closer examination

of the reasons behind the decision to go, we see evidence of a continuing lack of direction. As with earlier career interests (at least those implicit in the choice of one's major), some respondents took the "path of least resistance" in deciding to go to graduate school. It was another way of postponing long-term career decisions. For one woman, the decision to get a Ph.D. in chemistry was a "gradual process" occurring during her junior and senior years of college:

I didn't really know where or what kind of job I would look for if I were going to. And, somehow, having been in school all of my life, graduate school was the path of least resistance. So I applied to graduate school, sure, with some notion that having a Ph.D. would be a good thing. [40]

As another woman explains, "the only career choice open was to go on and get a Ph.D. and teach somewhere." She had majored in ancient Greek while in college "without ever thinking much beyond college." Although she became increasingly unhappy about the prospect of doing graduate work in that area, she, at the same time, felt "very trapped." And so she went through the process of applying to graduate schools. Instead, however, she was awarded a scholarship to study in England, an equally unsatisfactory option, as it turns out:

I felt very trapped because although by this time I was pretty miserable spending a lot of time in the library and studying musty manuscripts and stuff, I didn't know what else I would do if I didn't continue. And that made me feel very, very trapped. And I remember the night I had to sign the thing for the scholarship and send it back to them, I just remember really having to force myself to sign it and yet I felt I had no other choice. Where would I go? What would I do? I felt completely untrained for anything, unfit for any profession. [9]

A few others, similarly ambivalent, relied on the advice of family and friends regarding graduate school. For instance, a young man, a psychology major in college, had done some volunteer work in a community center during college. Upon graduation, he was asked by his

supervisor, "Do you have anything in mind?" Since he had no response, he was urged to consider a career in social work:

[He] sat down with me and actively recruited me into social work and social group work. 'You are superb at what you do. You are very talented and we need people like you.' That was the basis of my career decision. I applied to [a private] School of Social Work. I didn't apply to any other school. [41]

Now, as a practicing psychiatrist, he has some insight into his decision-making process:

When someone doesn't apply to many schools, it suggests a career choice that is ambivalent. If I got rejected, I wasn't going to do it.

While it was not unusual for individuals to take a cue from others in considering graduate school as an option, it at times appeared as if such cues were the only predisposing factors. A case in point is a man with a particularly interesting background. Immediately after high school, as a means of postponing a career decision, he enlisted in the Army. After his discharge, more certain that college was an appropriate choice, he enrolled in a four-year program. To support himself, he worked as a "journeyman lineman" doing "high tension work." Due to a job-related injury, however, he was forced to consider other means of work after graduation. He considered some type of corporate work and applied for a management training program. But before his application could be acted upon, he became "desperate for work." He sought the advice of an uncle, a "cardiologist." The dialogue between them indicates the extent of his uncle's influence:

He said, 'Well, why don't you consider hospital management?' So I said, 'I don't know anything about it.' And he said, well, since he was in a medical profession that all the hospital administrators worked less hours than doctors and made very good money. And that it was an interesting job and it entailed a variety of responsibilities and certainly wasn't boring and it was a very politically and socially oriented field and so he recommended I look into it. So I said, 'Well, how do I do that?' And he said, 'Well, go to the

hospital and talk to the administrator.' So, upon his encouragement, that's what I did. [39]

It appears, then, that some respondents tended to drift into graduate school rather than to consider logically the possibilities and ramifications of such decisions. They were practical only in the sense that most pursued studies in areas similar or identical to their undergraduate majors. Even this occasionally proved impractical, though.

One woman, in particular, spent three years trying to get admitted to a Ph.D. program in psychology. When asked to explain her perseverance, she remarked:

Because I just didn't know anything else to do. It was what I had, quote, been trained for. I had a degree in psychology. What are you going to do with it? [13]

By the time of her third application, she was able to focus her interests more realistically:

. . . I was a little bit older and a little bit wiser. And, I had some time to think about what I did and did not want.

And, in retrospect, she recognized that her own inability to understand what she wanted was the primary reason, more so than her grades, for her rejection from these schools:

. . . I just couldn't say what I wanted to do. These schools were asking on applications, 'What do you see yourself doing ten years from now?' Ten years from now! I don't even know what I'm doing ten minutes from now [laughing]!

After several hours pursuing an occupational handbook to "get ideas for different fields," she switched from clinical psychology--"which I didn't even know what the heck it was"--to rehabilitation counseling.

The woman described above was fortunate in that she recognized a more appropriate field before she invested time, energy, and money in graduate work. A few others were less fortunate, however. One such

woman, with an undergraduate major in education, decided to pursue graduate work along the same lines. She obtained a Master's degree in "natural science education" only to realize that psychology was her true goal:

I enjoyed teaching very much, but I knew myself well enough to know that five hours of teaching the same thing, even though each class is different and exciting and everything else, I could probably tolerate doing it for a couple of years and that's all. [7]

Since she liked the "interaction" with students, she thought of psychology, although her decision to do "clinical or experimental . . . hadn't been terribly defined." Her plan, she said, was "to get a Master's degree and figure out what I wanted to do with my life." She ultimately received a Ph.D. in Educational Psychology.

As their graduate studies progressed, respondents seemed to become increasingly more committed to their chosen fields. As we have seen, a couple switched from one field to another as their long-term plans became more realistic; and one dropped out when she realized graduate school, particularly social work, was not appropriate for her. All but one, therefore, ultimately received a graduate degree (although some did not complete the requirements until medical school was begun or completed). And a number went on to obtain or work toward a second degree. And we will see that still others, who worked for a while directly after college, began graduate studies a few years later. In all, it seems that many older matriculants to medicine are a highly educated group. If we include all who eventually obtained a graduate degree, regardless of when, then we are speaking of approximately one-third of our sample who have a Master's degree, a doctorate, or both.

Employment

While graduate school provided some respondents with an opportunity to progressively crystallize or reformulate their long-term goals, the others were faced with more immediate decisions regarding the future. For some, this created a disappointing, and oftentimes disorienting situation. One young man, who abandoned his plans to attend law school, explains:

I really didn't know what I wanted to do. Rather than do something, I would rather do nothing than do something without really wanting to do it. So, I just decided to stop doing everything career-oriented, and spread out and look exactly at what I wanted to do. It was kind of a delayed identity crisis, I guess. I'd kind of put it off to the point when I was graduating college, rather than puberty, when most people go through it. [17]

So, he decided to "hit the road," and spent five years in California and South America, doing "a little writing, a lot of fishing, and a lot of drugs." After two years of this primarily aimless existence, however, he started to think about his future:

I started thinking I probably shouldn't do this for the rest of my life, although it was kind of attractive to think about it. You know, I was having a pretty good time. But things were starting to get a lot more difficult. People became more suspicious. For example, it was harder and harder to hitchhike rides. You used to be able to go out in front of the supermarkets and get a day's worth of food, just by the stuff they were throwing away. Just to be able to sell blood, to survive. They cut that out because of hepatitis. All of those things were drying up. So, I thought I'd better get a skill.

This man surely represents an extreme case, at least in terms of the amount of time he needed before considering the future. But his sentiments, that is, his uncertainty about what he wanted to do, generally, and what he was capable of doing, specifically, seemed to echo the feelings of many of his peers. One other respondent, for instance, took a similar route, traveling to Ethiopia where she taught English as

a second language, then drifting in Africa and Europe for a couple of years. Others took a less extreme respite, remaining in the United States. But they were no less unsettled in their lives. One woman worked as a waitress and bartender for a year; others did various clerical or semiskilled jobs, with minimal pay and little security.

One group of college graduates shared a particular problem in establishing themselves in the labor force. These were the women who married while in college or soon after and, more often than not, had children. The anticipated conflict between home and family and work, described previously by many of our female respondents, became a reality for them. Typically, the kind of work they did, as well as whether or not they were able to work, was dictated by the circumstances surrounding their marriage. In all cases, the husband's career took priority. This often meant repeated traveling from one country to another, or one state to another. While this clearly advanced the career and position of the man, it disrupted or hindered that of his wife.

One woman, a brilliant undergraduate student, had been offered the opportunity to spend time in South America teaching English as a second language. She changed her plans, however, when her new husband was offered the opportunity to do graduate study and work in Paris, and Italy, and then in the East and Midwest United States. "For that period of time," she explains, "I am essentially following him around without really much thought--without really any thought of any kind of career." [Emphasis by respondent]

Similarly, another woman followed her husband, a minister, to graduate school, and from parish to parish. She managed to attend graduate school, as well as work part time, but this created conflict

with her husband:

. . . it was mostly me fighting my husband all the time. Him trying to get me to quit [graduate school] and just take a regular job because we needed money. And me, trying to think, Well, what else could I do? What else is there? What else do I know? Just feeling like there wasn't anything else. It really wasn't easy to get jobs. [48]

Another woman seemed less frustrated at following her husband, a veterinarian, first to school, then to the military, and then to establish a practice. She said she enjoyed her freedom, with time for gardening, volunteer work, and various courses. "Occasionally," though, she admits, "I would meet someone who was doing what I thought I'd like to do and I'd throw pillows around for an hour and a half [laughing]." When asked if she thought she would eventually resume her work in microbiology, teaching at the college level, she replied: "I didn't think. I didn't think. I just didn't think."

The positions that were available to these women were basically clerical positions with low pay and little or no opportunity for advancement: One woman with a Master's in French language and literature describes her experience:

. . . I was looking at jobs like working in the credit department at the local Sears Roebuck [laughing] and the only job I came up with was the university library. It was a job that was essentially a twelve-month-a-year job with two weeks vacation. The requirements were that you spoke three languages in addition to English . . . and the pay was something like \$4600 a year. It was absurd. [It] was a very depressed economic area and there weren't a lot of jobs. [10]

Another woman, in a similar predicament, describes the available jobs as "beneath" her. But, because of their constant geographic mobility and intermittent pregnancies, these wives were unable to find jobs in which they could advance in salary and responsibility.

Certainly those who made the easiest transition from college to

work were those who majored in areas that could be applied to various industrial settings, such as math or engineering, or those who were trained in teaching or nursing.

The others, with backgrounds in the social sciences and humanities, were at more of a disadvantage. The fact is that in most cases they graduated from college without marketable skills, as a consequence of failing to consider the more practical aspects of their undergraduate major. Finding a job, for them, was not an easy task. ". . . there weren't a lot of jobs available for college graduates who had no particular skills or backgrounds," said one graduate school dropout.

A few were forced to resort to employment agencies, but this proved to be a disillusioning and demeaning experience. One woman explains:

I had been looking for work. . . . And I got very discouraged because I went to agencies and they said, 'Well, what can you do?' And I said, 'I don't know.' I could type maybe thirty words a minute, and I certainly didn't take dictation and I certainly didn't want any kind of clerical work. But the agencies would always shove you into these sort of nice jobs for women. But the ones I was getting, since I had no skills and no experience . . . were \$80 a week to compare paint chips for a company. The ones that looked any good, that paid any kind of decent salary, they didn't want college graduates for. So I got very discouraged. [13]

As a solution, she decided to "take a year off" in order to apply to graduate school. She made "a deal" with her mother:

I said, You let me sit around here and just not work, and I will keep the house clean and wash the dishes and cook and be a housewife.

The majority of respondents, however, were determined to find full-time, permanent employment. And, for the most part, they did.

Career Choices

What, then, are the patterns that are discernible between

early life experiences, especially in late adolescence, and the decision to enter medicine relatively late in comparison with average recruits?

As we examine the early career choices of those who later pursue medicine, we find some similarities. Fully three-fourths were in what might be referred to as "people-oriented" or "service-oriented" occupations. More specifically, three fields are prevalent: health, education, and service or public sector. The rest are in business or industry.

Health

Just over one-third of respondents, the largest single category, were employed in the health field, typically in a hospital setting. They varied in their specific occupations, however. Nurses accounted for the largest number. At the time our respondents entered nursing, the usual route was a "three-year program," which led to an R.N. degree, but not a Bachelor's degree. "At that time," explained one nurse, "it was not the thing to do, for anybody to go to school." Those who did have "a Bachelor's degree, or more education," were pushed into teaching or administration." Among the five nurses in our sample, three had initially trained in a four-year degree program; the others, in a three-year nursing program. However, after working for a while, those without the college degree returned to school to complete the requirements for it. And two of the nurses eventually received a Master's degree. As a group, they worked in a variety of hospital services, including pediatrics, cardiovascular, surgical, and medical, as well as outside the hospital, in public health. And, individually,

their own careers entailed a number of different settings over time. They were similar, in their career patterns, in that they began as staff nurses, and moved to more supervisory, administrative and/or teaching positions within a few years.

The others in the health field were a diverse group. Two respondents, like the nurses, had made a relatively early commitment to health care. One worked as a pharmacist, another as a microbiologist in public health. The rest made a somewhat later decision. These were typically individuals who had worked in other areas first. For example, one respondent, described earlier, was planning to enter graduate school in hospital administration. In the interim, however, he was offered a position as a hospital orderly so he "could see how a hospital functioned." Gradually, he would assume more and more administrative duties. Another respondent, who dropped out of graduate school in social work, ended up as a "case aide--sort of halfway between a secretary and a social worker." Although she disliked social work, per se, she was attracted to a hospital setting. Eventually, she became a research assistant, doing statistical analysis in the area of epidemiology.

Another respondent was specifically attracted to the health field, even though her skills as a computer programmer had wider application. Although "leery of technology and assigning everyone a number," she felt computers "could be really useful in a medical field." She worked as a programmer in several medical areas, including genetics, dental research, and community organizing, while traveling intermittently. Her most gratifying position, "the thing I liked the most," she said, was providing "in-house" training where "secretaries,

engineers, people who might not have much of a future could take these [computer] courses and hopefully get into better paying jobs or something that is more interesting, perhaps. That is what I enjoyed."

Education

Like the health field, education attracted a substantial number of respondents, nearly one-third. Only one had entered college with the intention of later teaching, although it was not necessarily his first choice. "At the time," he said, "I was not too aware of the business world or what was available to me. I didn't receive any counseling or guidance that way. Teaching, I knew at the time, was secure. And, at the time, it was!" Before long, he saw teaching as a permanent career. His goal was "to be a principal," and within a short time, he was. And he enjoyed it. "I was satisfied that I was getting what I needed, what I felt I needed from teaching, as well as giving," he remarked.

The others more or less drifted into the field of education, but were no less committed. For the most part, this remained their primary involvement until medicine. The extent of their commitment is demonstrated by the number who received Master's or doctoral degrees, or both, in the field of education or related areas. More specifically, these degrees were in psychology, special education, counseling, and the basic sciences. Those with degrees in the basic sciences (with one exception) were more likely to be teaching at the college or graduate level; the others were involved with elementary or secondary school populations (either in teaching, counseling, and/or administration). It is interesting to note that more males than females were at the

lower levels, while more females than males were at the higher levels.

Three respondents, in particular, are worthy of mention because of their concern for "deprived" or "maladjusted" children. One man, though not specifically looking for a teaching position after college, managed to find one in a government-funded "social agency," which he likened to a "trade school." He taught math and science to "mostly unemployed poor Blacks or Puerto Ricans who were trying to get somewhere." Later, in a similar vein, he taught more "advanced math and science" in a "pre-college program" designed to prepare students "without proper credentials" for entrance to college.

Another, as a "last minute decision after college," decided to teach in the public school system. In fact, in order to be qualified to teach he had to supplement his degree with twelve additional credits of what he described as "ridiculous subjects." He chose to work in a special school designated as a "600" school because teachers received a six-hundred-dollar bonus to work there. Basically, the student population was comprised of children who had been "thrown out of other schools." His reason for volunteering to work there went beyond the financial reward, it appears. Rather, it had much to do with his own background. He explains: "I was half a delinquent, myself. And I figured this is finally a way--this is somebody I know how to deal with. I understand this person. And that's why I did it." Although an interest in education was late in emerging, he became very serious, he said. While never an assiduous student in high school or college, his commitment to teaching prompted him to obtain a Master's degree in education, and to partially complete his doctoral studies. Teaching was to be his "career," he said. "I was going to do that forever. I

thought it was important. I thought I was making a small, but significant contribution. That was my career."

Service or Public Sector

The service field comprised a smaller number of respondents than health or education, a little over one-tenth. Two worked in a social work capacity and two as police officers. Both police officers were among the oldest of our recruits, in their forties when they matriculated in medical school. They were similar in a number of respects, including their social background--Italian working class--and their early interest in medicine--during childhood. They entered the police department at about the same time, in the late fifties, early sixties after brief experiences in other fields. Even at that they were similar; one, a man, worked as a teacher of physical education; the other, a woman, worked for the Department of Social Welfare after a three-year military enlistment in the Women's Army Corps--both service-oriented fields. The woman officer is a particularly interesting case, in that she expressed a desire for medicine and the police department at a time when women were certainly not encouraged to do either. Both fields, however, offered her an opportunity to "work with people," her main goal being "wanting to help people." Although she had a strong interest in science during high school, she somehow moved away from it by the time she reached college, where she studied political science and psychology. "At that point," she explains, "I guess somebody probably told me, 'Well, what do you want to go into medicine for?' So," she said, "I proceeded in the other direction," and "decided I was interested in a police career." The main attraction was that "as a

police officer, you are not isolated. You are interacting with people. We are a service agency. Ninety percent of what we do, is we give service." Yet, that too was a difficult path for a woman. At the time she entered the system, there was a quota for women, and once in, women were not eligible for promotions. Nevertheless, she said, "I came in and had every intention of making it a career." And that she did. She progressed through the ranks, becoming a sergeant, lieutenant, and then captain, all of which were based on competitive examinations. After captain, however, promotions were by recommendation. She eventually was known as the highest ranking female officer in the New York City Police Department, and was the "first woman" to attend an FBI training program. During her career she worked in a number of departments, including the precinct, Civilian Complaint, Property, the Youth Division, and the Policewoman's Bureau. In addition, she received a Master's degree in sociology, with a concentration on Juvenile Delinquency. "It was coordinated with what I was doing at the time. I was working for the youth division."

The other police officer, unlike his colleague, did not intend to make police work his career. Rather, he was committed to teaching. "I always had a lot of respect for teachers in school. I was very athletic, played some semi-professional baseball. I played basketball, football. And I was interested. I thought I would be happy doing that for the rest of my life. . . . And I enjoyed it. I really enjoyed it." For reasons he did not go into, however, he decided to leave teaching and work for the police department "as a temporary job." "But," he explained, "you get involved in playing cops and robbers and I stayed for fourteen years."

The two other respondents in the service field were in fields more typically associated with an inclination toward medicine. One, a man described earlier, entered social work on the advice of his supervisor. After receiving a Master's degree in Social Work, he returned to the YMHA in which he grew up and later worked while an undergraduate, becoming the protégé of the man who encouraged him to pursue social work. He was put "in charge of a teenage--adolescent program":

. . . We had to demonstrate that a professionally trained social worker does something else with kids than just recreation. So we evolved an approach where we would serve--because of our limited resources--two types of kids, the extremely gifted and the kid who wasn't making it. The in-between kid would somehow make do. And we were very successful in what we did at both ends. . . . So, it was a very satisfying experience. [41]

He envisioned a career--a very successful career in social work. "It was very clear from my supervisor and other people that I would be successful and a nationally known figure within a short period of time," he remarked.

The final respondent considered here was also described briefly earlier. She spent three years trying to gain admission to a Ph.D. program in psychology before she realized that Rehabilitation Counseling was more in line with her interests. She successfully completed a Master's program in that subject, and worked for a while in a CETA program designed to place the aged handicapped in different occupations. She found her work gratifying, until the government sponsoring agency changed the definition of "handicapped client" and "the whole program turned upside down."

Business and Industry

Those who entered business or industry perhaps made the

easiest transition from school to work. Among these respondents, one-fourth in all, approximately half were in engineering, the rest in computer science. Engineering, because it required specific educational training, attracted respondents fairly early. In fact, all had expressed a long-standing interest in science, typically from childhood. One respondent said he was "programmed" for science partly as a result of the "Sputnik era" and partly because of his "familial background." Nearly all attended special science high schools, and there, the more general orientation toward science became "focused" toward engineering. "My interest just matured and changed periodically," said one respondent. Most chose engineering from a "pragmatic point of view," although it appeared that the choice meshed well with personal inclination for the most part. One respondent, however, said, "I wasn't doing it because that's what I really wanted to do." He preferred the pure sciences.

I had always been oriented toward science. There was no question in my mind that I would be involved in something to do pretty much with the hard sciences. I guess I kind of locked myself toward the direction of chemistry. [25]

But, "looking into the situation," he found that in order to do anything with chemistry, "it would be necessary to have a graduate degree." "With my economic situation," he explained, "I couldn't imagine going to college very much and graduate school seemed out of reach." Engineering, it seemed, offered security and stability without necessarily having to do additional graduate work. However, one engineering graduate felt that after college he was "ill-prepared" to go to work. "There's no future in those entry-level positions." Nevertheless, engineering was perceived by all to be a "nice" career choice, a "good career" for someone. One respondent used an "anecdotal observation"

to illustrate the point:

My grandfather was close friends with the guy who was chief engineer on the IND subway in the Depression. And he did so well and that was such a wonderful career and he was Jewish and that was so unusual, that that just had to be a nice, stable career. [Emphasis by respondent] [34]

These men worked in a few different areas of engineering, including chemical and electrical; and they worked in both pure and applied research. All did graduate work at either the Master's or doctoral level, or both.

Those who entered computer science also expressed an early interest in math or science; however, their career choices were somewhat more accidental than the engineers'. Typically, these respondents received on-the-job training in computer programming after graduation from college. For the most part, they were not sure where to utilize their abilities:

I just looked for a job and one of the companies that were interviewing math majors . . . offered me the best salary, training opportunities that any offered. That was kind of how I made my decision to go to work. . . . I stayed there for eight years. [23]

The fact that companies provided on-the-job training was among the most attractive features of computer programming, particularly during the period of the sixties. This, plus the "flexibility" in terms of location--"I could get a job anywhere I liked"--and the hours--"I started free-lancing, making my own hours"--drew graduates away from other fields. For instance, one graduate worked in "quality control, doing the closest thing I thought I would be able to do with a degree in mathematics." However, after a short time, she trained as a programmer, as did a former employment counselor and teacher.

Those in business or industry seemed to place a high value on

job security and stability and seemed to make an earlier, firmer commitment to their career choices than many of those in the more service-oriented fields, with the possible exception of nurses and teachers. Nevertheless, each respondent who attempted to find a niche for himself, eventually did. Prior to pursuing medicine, they remained in their chosen fields for as many as twenty years, although the average time was between five and seven years. A substantial proportion went on to do graduate work in line with their occupational interests. And they demonstrated significant success, as they moved through the system, gradually assuming more and more responsibility and prestige. So what then precipitated the decision to pursue medicine, when for all intents and purposes these individuals seemed to have many of the components of a satisfying and successful career? The next chapter will attempt to explore some of the issues involved in the decision to leave early careers in favor of a new one, namely medicine.

Chapter 4

The Decision to Pursue Medicine

The decision to become a physician is a complicated process, influenced by social, psychological, economic, and situational factors which allow some aspirants to crystallize their early thoughts about medicine, yet force others to dismiss, or never consider, medicine as a viable option.

Two patterns predominate as we examine the process of choosing medicine as a career later in life (with approximately one half the respondents falling into each). (1) The first includes individuals, primarily women, who reach a point in their lives when they recognize a need for change. Caught in the midst of the women's movement, they begin to question choices made, and those not made, at an earlier time. Those who are homemakers search for careers; those who have careers question the relevance of such choices. In the process, they begin to systematically consider a number of career options, eventually recognizing medicine as the best choice. (2) The second includes individuals (both men and women) who also realize a need for a change. Basically, these are people who have made a rather firm and satisfying commitment to a career. But they reach a point where their work no longer satisfies their needs, either because the system does not permit them to carry out their duties adequately, or because they have redefined their expectations. Yet, unlike the first category of respondents, who

go through a gradual process of deliberation, eventually choosing medicine, those in the second category, in a more straightforward manner, realize that medicine is the only, logical progression.

The Early Decision Against Medicine as a Career

Before examining the period, during adulthood, when respondents first think of medicine as a career, and almost simultaneously, decide to pursue it, we should also consider the factors which hindered such a decision at the more traditional age. That is, what accounted for the decision not to pursue a career in medicine?

If we recall, social and economic constraints helped shape the early career plans of our respondents (see Chapter 3). These same factors, it seems, more specifically discouraged a career in medicine. "[Medicine] was always something in the back of my mind," explains one medical student. "But, coming from my background, I just never thought it was a possibility." This woman's background entailed a number of problems, including the divorce of her parents when she was a child, and the alcoholism of her mother. Social as well as financial circumstances, therefore, made medicine an unrealistic choice for her. Others, whose childhood years were less complex, specified financial limitations as dominant. One physician said simply, "Whenever I thought about medicine, I rejected it out of hand for economic reasons, primarily." "If finances were not a problem, I would have gone straight to medical school," said another. He elaborated:

I subdued my interest in medicine as a very practical decision. I don't think I ever really dismissed it. But I had no real way of achieving the goal because of financial considerations. . . . It would be financially a terrible burden for me at that time, and my parents had no way of supporting me. [6]

Still another felt he couldn't afford to go to medical school. One of five children, he said: "My parents didn't have that much money, so it was just a passing fancy at that time."

These individuals might have had an opportunity to pursue medicine if financial aid, or scholarships, had been available. We have seen that regarding undergraduate education, some respondents were naive about obtaining such aid, whether or not in reality it was available; similarly with medical school. A few respondents emphasized that when they first considered medicine, during the late 1940s or early 1950s, aid was not "readily available." "In those days," said one woman, "it was different."

Not everybody went to medical school. It wasn't like today when people from poor families can go because of grants. If you weren't the son or daughter of a doctor, you might have wanted to go into medicine, but you'd never be able to realize it because of the expense involved. [35]

The use of terms such as "passing fancy," "subdued," or "in the back of my mind," to describe an inclination toward medicine in the early years suggests that respondents viewed that career as an unrealistic one; but not all respondents were willing to relinquish it entirely. Yet, not one expressed frustration at having to make other choices. One woman, who considered both police work and medicine simultaneously, from childhood through high school, was easily swayed away from medicine by the time she reached college:

I had intended to major in physiology, but I was sort of led away from that. At that point, I guess somebody probably told me, 'What do you want to go into medicine for?' So, I proceeded in the other direction.

"I didn't dwell on it," she added.

Medicine was not only believed to be financially remote, but intellectually unattainable as well. One respondent, who as a child

wanted to be a physician, did in fact study premedical courses while in college, just after World War II. But he said:

I was also very afraid I couldn't hack it. Because, in my time, doctors and priests were held in awe. They were so intellectually superior to everybody, it really scared you. [2]

This attitude has not changed much in more recent years. A much younger respondent grew up with the image of a doctor "as being held so high above everybody, they were equivalent to God." "I can't be God," he thought. Hence, medicine came to be perceived as something only those with special qualities could achieve. Some respondents were unwilling to even try: "I was not ready to sit down and study the amount of time that was needed." Others tried and failed: "I couldn't get into the premed program. They wouldn't consider me, and justifiably so. I mean, my grades were horrendous." Another respondent, whose career goal had been medicine "for the longest, longest time," realized "in looking back on it" that apparently his "goals were not that strongly set." "I wanted medicine," he said, "but not enough to apply myself to get the grades that were necessary."

The women we studied experienced unique constraints, imposed by the social climate of the 1950s and 1960s, which dictated the role of wife and mother for women in adulthood. Among the only appropriate careers for women were teaching and nursing. Medicine was believed to be beyond their reach. Early childhood dreams of medicine were stifled by parents and teachers. The great majority of women never even considered medicine as a career--as a dream, or a reality. "Medicine," one woman recalls, "was always interesting to me, but I never considered it for myself." Another remembers being "jealous" of her friends who went to medical school because medicine seemed "really interesting

and really active." Yet, she said, "I didn't realize it would be a good thing for me to do. [Emphasis by respondent]

Women were geared, instead, toward the arts and humanities. One woman, who thought seriously about medicine during high school, decided to take an advanced human physiology course during her first semester of college as a means of testing this interest. If she liked it, she would then take the more basic premedical courses. She also took an advanced course in English and in history. "People thought my talents were obviously in the humanities," she explains. "But I didn't think so. I think basically, I knew better. It's just that I had always loved to read, and I thought a lot. But I loved the physiology course." To aid in her decision-making, she sought the advice of a school counselor:

I talked to her about wanting to go to medical school. And she said: 'It's absolutely impossible. You can't think of something like that. You have to borrow a lot of money and never be able to pay it back. You will never be able to get married. It requires more stamina than women have.' [48]

Her father, who "ridiculed" her interest in medicine, echoed the sentiments of the school counselor. This attitude was reinforced again and again, for this respondent and others. She looked to a female classmate as a role model, but this served only to discourage her further:

Her father was a Boston doctor and she wanted more than anything to go to medical school. . . . She was always studying and crying and not doing well on the MCATs. She took a leave of absence and it was rumored that she tried to kill herself. So, I could see how terrible a thing it was to try and not to make it.

The fear of failure itself created problems for women who were goal-oriented. One woman, in particular, decided during her last year of college, as a biology major, to apply to medical school. She describes this decision as "some kind of enlightenment, of saying, I can do this

if I want to." After several rejections, however, she "withdrew her remaining applications" because, she said, "I must have been afraid of failure."

Contributing to this fear was the image women had of themselves. Medical school, in particular, was perceived as something "that is hard." "Even though I had always been really good in school," said one woman, "I just didn't have the confidence." The women who did pursue medicine were seen as special, as "smarter." "They were something I wasn't," said one respondent. Of course, as we have seen, men, too, were intimidated by the perceived difficulty of medical school. But for women, it seems the fear was more pervasive. It affected not only their feelings about medicine as an acceptable career, but was related to their self-image, generally. For instance, one woman pursued art because of "encouragement" by her family. "They had very little regard for my intellectual interests." So, she said, "I grew up feeling insecure about my intellect. I just never had any confidence in my intellect." She spent several years trying to convince her boyfriend to enter medicine so she could "vicariously enjoy it."

It seems this fear of medicine was part of a more basic fear of science, generally. "I had been afraid of science most of my life. I had been terrified. I felt I didn't have the potential for scientific, analytic thinking," said one female medical student. Another woman said she had "never" been interested in science. In college, she explained, "there was an obligatory science course. I took geology, which was supposed to be for people who hate science. And I hated geology, too." She repeats, "I had never been interested in science.

In fact, I had been scared of it mostly." [Emphasis mine] The suggested ambivalence between hatred and fear of science is striking, in this case in particular. One wonders how many other women confused their feelings this way. If it was fear, rather than lack of interest, which prevented these women from considering science or medicine, then many more might have been inclined to study these areas if the fear had been dissipated. Yet, it is equally apparent that even the women who were science-oriented failed to focus on medicine as a career option:

[Medicine] just didn't occur to me. I was interested in science and did science projects in school and enjoyed it. I just never thought of medicine for myself. I'm sure that's a reflection of the socialization going on around me at the time. [18]

She opted for a doctorate in science instead. "It was more accessible," she explained. "Medicine, still for me, was inaccessible. Whereas graduate school, while it was a breakthrough for me to think of myself doing that, it was somehow more permissible, a more acceptable thing."

Medicine, simply, was perceived as a man's profession. One former nurse illustrates this attitude. While in nursing school, she took some courses with premedical students. During her second year, when she came out "in the top of the class, shocked" that she did so well, she said to herself: "Wait a minute! If I am with premeds and I did well, maybe I should consider being a premed." But, she remembered: "Medicine is a man's profession, nursing is a woman's profession, and that is what I will do." When asked how she felt about her decision, she replied: "I don't think there was a tremendous sense of loss."

The attitude which discouraged women in medicine was so

"deeply ingrained" that the frustration level was low. One woman, whose family owned a psychiatric hospital, said that all she ever wanted to do was ". . . be a doctor. I grew up essentially on the hospital grounds, being surrounded by nobody but doctors or doctors' children. There wasn't anybody else." She, however, was expected to "marry a doctor," not become one. Her brother and five male cousins were to be the physicians:

I don't think I really became frustrated, because my whole world was so oriented to 'this is how things are done.' Not just in this area, but in every area. Everything was prescribed. I remember wishing I were a boy, as opposed to being a girl, because then I could do all these things. But, since I could no more be a boy than I could be Superman and fly, even though I would like to fly, there was very little frustration to it. I think the frustration came later. [48]

If more women had been frustrated, they might have been willing to "battle the odds." As it was, those who did were "very few and far between," said one woman. And, they "were totally dedicated, totally driven women who were willing not only to work that hard educationally, but they were willing to stand up against all kinds of social and professional pressures." And, she admitted: "I thought I was not that determined." [Emphasis by respondent] The image of women who went into medicine was intimidating. "You forfeited your whole identity as a woman to go. You couldn't really be a woman if you went."

The above discussion focuses on those who at one time thought about medicine as a career, but recognized that because of financial limitations or social expectations it was not an appropriate goal. There were many others who, at least on a conscious level, never acknowledged an interest in medicine. Here, it is difficult to determine if medicine simply was not appealing to these respondents, or if

the prevailing constraints were so pervasive that any real interest was never allowed to develop or surface. In retrospect, a few respondents suspect that they may have had an interest in medicine, but were not "consciously" aware of it at the time. For instance, one physician, a psychiatrist, explains:

It was there, in retrospect, it was there. It had to be there. But consciously, I was not aware of it. There were all kinds of innuendos. I grew up in the shadows of [a major medical center]. There was a sense of awe about that place. Always, a sense of awe and an emotional feeling about that place. . . . I am not sure how one shapes a career, but I had no notions of being a doctor when I was a kid. [41]

Others who were not trained to be as insightful, that is, in psychoanalytic theory, also learned that medicine was something they had wanted earlier, but had repressed or "forgotten." Usually, they became aware of this when they were contemplating medicine as adults:

I called some people when I finally made a decision to try and get into medical school, and you know, I thought I would surprise them telling them what I was doing. And a couple of them said, 'Oh, that doesn't surprise me. You mentioned that years ago.' My memory is not the greatest. But my parents even saved all my college letters, and they pulled out one for me where I apparently was having a lot of trouble in chemistry, and I said something like 'I guess I won't pursue medicine,' or something like that. I don't remember that at all, but apparently I did have it in mind. [36]

Another woman learned, to her surprise, that she had an even earlier interest in medicine. When she called a childhood friend that "she hadn't talked to for a long time," and said, "Hey, I decided to go to medical school," her friend complacently replied, "Oh, really, it's about time!" Our respondent, bewildered, said: "I didn't remember saying anything to her, but obviously, she knew that's what I wanted."

Another respondent, a man, though not confronted by a

revelation that he always wanted medicine, had a sense that the "seeds" for medicine "were well-planted." "I can't say that I ever had any interest in medicine," he explains, but "I know when I look back . . . that the seed was probably planted in me somewhere." For instance, his father's work history seems to have had an impact:

. . . My father had been everything, shoe salesman and I don't know what else. And then at some point, he was with the Post Office department for many years. And finally he hurt his ankle walking, while he was a letter carrier, and left the Post Office. Then there was a progression of many jobs. At some point he was without work, I don't know for how long. And he took a job as an attendant at some hospital, and he went back to school and became a practical male nurse. He was in that until he finally retired. [3]

In examining his own experience, our respondent recalls other "seeds," for instance, his feelings about his military obligation:

. . . even before I went into the service, I was basically a conscientious objector. But in the Korean War there was not the fervor as in Vietnam. Somehow we got sucked into that war, and there was a belief that we were doing it because we had to. So I went in. But I never saw myself as a killer.

And then, later, as an engineer, his choice of work reflected this attitude:

Too much of electronics was at that time defense-oriented. I didn't see myself designing a better missile or missile system to kill that many more people. . . . There was a conscious effort to avoid such defense and killing. I wanted to be benefiting mankind. I even remember keeping the [engineering school] catalogue and reading and rereading the dedication, which was a form of Hippocratic oath, except for engineers. You don't build a bridge so it falls down and kills people. You build a bridge and do something that will benefit mankind. Already, the human aspects were of interest to me.

This image of seeds being planted, which later take shape in the form of medicine, provides an interesting perspective for understanding the career shifts which occur among our respondents. As we examine their early career choices, as we have done in the previous chapter, we cannot ignore how similar they are to medicine in some respects.

Three-fourths of respondents entered either the field of health, education, or service. These areas share with medicine a concern for others and the ability to deal with people on a one-to-one basis. So, in essence, the shift to medicine is not a drastic change, at least in terms of the nature of the work performed.

What is it about medicine, then, that warrants a career change? And how does this process occur?

Early Career Choices Reconsidered

Pattern I: Medicine as One Among Several Options

The first set of respondents are nearly all women, most of whom had been employed full time, or in graduate school at the time they considered a career change. The remainder of the women had less stable career histories, and were typically homemakers. Both groups, those who had worked and those who were homemakers, had been influenced in their early choices by society's expectations for women during the 1950s. Those who were homemakers conformed specifically to these expectations. The others, who worked, also conformed though less explicitly in that their career choices--the type of work they did--was to some degree influenced by the opportunities appropriate for, and available to, women at that time.

Yet, they all reached adulthood during a time of transition. By the late 1960s, the role of women began to change, with the impact of the women's movement--"the most significant social movement of the twentieth century," according to one respondent. Being a wife and mother was no longer the most desirable goal. Our respondents, like many women, went through a process of rebirth, in a sense. They began

to challenge the assumptions which had, for so long, dictated their lives, consciously or unconsciously.

In a broad sense, women learned "it is all right for me to want things for myself, to want to do, to want to be competent, to follow a career." "It was becoming acceptable to do something." It was this "timing" that allowed women to finally think in terms of a career. One woman said:

I had to start thinking about what I am going to do with my life. At that point, the women's movement had already taken root. I started to realize that I could actually have a career. I didn't have to think only in terms of looking for a husband and having children and that be my main focus in life. I wanted to do something that's mine to do for the rest of my life. [32]

Until then, women perceived their occupational role as temporary, to be performed before marriage and children, or perhaps after children reached school age. One's commitment was typically to the home rather than to the workplace. Now, as women began to see work as significant in its own right, the choice of an occupation took on new meaning. One woman who had an "eclectic background," including much traveling and some part-time work, was by her own definition primarily a "wife"--"a real frontier wife." Upon leaving college during her first year, she married and had three children soon after, living and traveling in rural areas. She reached a point, in her early thirties, when it was "time to make a commitment." She said: "I guess the distinction is career versus job--to something I would find gratifying as work that seemed worth doing." Or that "was personally rewarding," according to another woman. Also increasingly important was how one was perceived by others. "It was an embarrassment to be a secretary after a point--to be a secretary and married and nothing else." And

equally important was the notion of independence--financial and emotional. Occasionally, the need for independence was based on practical concerns. For instance, one woman left college when she married, and spent her energy preparing her husband for his career as a lawyer:

I really thought much more about what my husband was going to be doing. He had to get through school. Anything I was going to do was very secondary to what he was going to do. And he really discouraged me from thinking anything else. [11]

During his first year of law school, they divorced. She continued work at a variety of part-time or temporary jobs, which she described as "all these strange jobs." They included a "fair number of secretarial jobs, which I hated. I set up and ran a take-out restaurant. I did some editing, and transcribed tapes for people." She developed a pattern where she would work and then take time off: "I lived very marginally and then when I had the money to stop working, I would quit whatever hateful job for a while and live on my savings, and then I would look for a job." Finally, she decided to complete her undergraduate degree after a six-year hiatus:

I thought about it as a means to an end. I thought, I've got to get equipped to do something to earn a living. I can't spend my life at these kinds of jobs.

Confronted by the idea that new options were available, these women--regardless of their particular circumstances--had to decide which path to take. "It was all very vague," said one. "The decision to do something left open as many options as possible," said another. With no specific career in mind, they began to consider the list of possibilities, one by one. Some did so, first, by a mental process of elimination:

I just reviewed in my mind a lot what were the possible professions open to me. I had ruled out by this time, completely, further

academics and things like that. And there was law, which just to my temperament was completely alien and would involve reading a bunch of cases. And I couldn't imagine arguing a case in front of anybody. And then there was, I suppose, social work school and nursing. I thought about that briefly, but I felt when I thought about nursing, I felt I would be far too angry being that low on the totem pole and not having any control really over what went on, and being in a subservient position. So, somehow, by this process I came to the idea that maybe I would go to medical school. [9]

One woman combined several approaches in a "systematic search of the available careers." First, she underwent a series of psychological interest and aptitude tests which showed that she could be many things, among them a "music conductor, a minister, a social worker, a psychologist, or a doctor." "So, that was the beginning of my thinking about [medicine]." Then she spoke with a few people in different careers, one of whom was a speech therapist:

She said, you know, this is a really lousy job. You never get to do the things you should do. You do what the doctor tells you to do. . . . It didn't sound so great. In talking to her, it really came through it was going to be medicine. [33]

Another means of narrowing the options was to try out various fields. One woman considered "a number of things," among them social work. [Emphasis by respondent] She took a course in it which involved placement in a social work agency. Finding the experience unsatisfactory, she dismissed social work as a career possibility. She also considered clinical psychology, but didn't want to take the Graduate Record Exam which was necessary for application to graduate school in that area. To compromise, she focused on educational psychology, which had less stringent admission criteria. But after a semester of a course in that subject, at the graduate level, she realized while still interested in "psychology and the developmental part of it," she was not interested in the educational problems. Her process of making a

career decision continued:

So, there were a whole bunch of things, I don't remember what else. Those were the two things I thought about most. I did think about other professions, but frankly, I don't remember which. I disregarded those. And one night I got out of the shower. Literally, I said to my husband, 'I should have gone to medical school.' And he said, 'What are you going to do about it?' [23]

While some women lacked a clear idea of what they wanted to do as they began the process of exploring various careers, others were able to limit their options by relying on their skills, training, and experiences and inclinations as clues. This is illustrated in the following case:

: . . My husband and I, and our two little kids, were traveling through Europe, and took a lot of time just to sort of sit and talk to each other. I was feeling very itchy by then to pull things together. I had a Master's degree [in chemistry] that was never going to get me any further in the academic hierarchy. . . . I was teaching Lamaze classes, but didn't want to go on doing the same thing all the time, ad nauseum. And the children were of an age where they didn't need me all the time. While I adore them, and relate well to them, and so on, I am not very good at being a stay-at-home, full-time mother. They get on my nerves and I get on their nerves. I just get itchy to do something more serious. So it was kind of, all right, how are you going to pull all this together and take one straight professional path--which was what I definitely wanted to do. [40]

She had two options, she felt--a Ph.D. in biochemistry, which no longer interested her, and an M.D. degree. While she didn't like the idea of going back to the laboratory, "sitting there with research articles and test tubes," she found the idea of clinical medicine "totally foreign and rather strange." As far back as high school, she had given medicine a "passing thought," but said, "No. Not for me. Too messy. And also, I was really too shy. I was much more comfortable with laboratory things than with people, I think." But despite her reluctance, her husband, also a chemist, convinced her to become a physician. With an M.D. degree, she said, "I could go back to full-time

research if I wanted to, and teaching [in a medical school], or I could combine any or all of the above. It just made sense. It was the most logical choice."

Another woman, who worked at a college in "student affairs" as a "liaison between the administration and the students," began to get "itchy" in her work. Though demanding, it was getting "repetitious" and lacked "challenge." Also, she felt isolated in New England and wanted to return to New York City. So, she said, there came a period of saying, "If not this, then what else?"

I had done this before, but never came up with any good answers. I started hunting around in my head, and sort of pretty clearly thought, hey, you've left a lot of stuff back there, you know, when you left high school and college and left all those sciences and math behind. You used to like to do that. Why don't you think back to that and see if there was something there. You could pick up that interest. [30]

The most logical choice, it seemed to her, was computer programming. So she did an independent course in it, but realized she could not see herself "sitting there eight hours a day." Later that year, she visited a childhood friend, who was going through a similar phase. Her friend said to her, "You know, I have good sense about people. I could see you doing something in the medical field." "She hit on this out of the blue," said our respondent. And more specifically, the idea of becoming a physician assistant was mentioned:

It was as if she had sort of lit a torch and had a light go on. It was that kind of thing, like, why didn't I think of that before? The more I thought about it, the more sense it made.

So this woman began taking the prerequisites for admission to a Physician Assistant program. "Somewhere in between applying for a P.A. program and getting in," she said, "I started thinking in terms of medical school":

The thing that decided me, I think, was in a sense my age, because I said, you know, you are going to feel really foolish if you go through two years to be a P.A. and graduate when you are thirty-one, and then maybe do a couple of years working at it, then somewhere in your middle thirties deciding you want to be a doctor. And by then, it's really going to be too late.

A final group of women, though small in number, seemed to be the ones most likely to opt for a career in medicine. They had, at some time before, either during childhood or early adulthood, thought about medicine.

One woman in particular, who had been discouraged during her first year in college from pursuing medicine, somehow clung to her dream. "I thought about it, and wished, and thought, maybe I could." In fact, she had over the years collected medical school catalogues: "Everyplace we moved, I found out where the nearest medical school was and what the requirements were." In the meantime, however, she had one child to care for, and a part-time job. But, as with the other women, she reached a point where she started "to finally explore things in a kind of sensible, adult way":

I joined a consciousness-raising group and I started talking about my secret fantasies of going to medical school. There was one other woman in the group who wanted to go to medical school, and two women who either were in nursing school or wanted to go to nursing school. And they really helped me. [They said,] 'So, if you don't get in, big deal. Do you want to go through life wishing that you had gone to medical school? And what's so unrealistic about it? It's just a few courses. You can borrow the money.' And that it was a good idea. That it wasn't grandiose. And after a year of that group, I enrolled in my first premedical course. And I was pregnant too! [48]

Another woman, in a Ph.D. program in science, also went through a period of realizing her potential. She had applied to medical school during college, but withdrew her applications, because she was afraid of failure. Yet, during her graduate studies, she began to discover

that medicine was possible to do. She attributes this discovery to the women's movement:

There is no question in my mind that it was a direct result of the movement, of my talking to close friends about discoveries about what we could do. During that particular bunch of years, there was a very intense explosion of my own thoughts, about my own potential. And when I look back on the transition from graduate school to medical school, I really think it has a lot to do with not quite having enough belief that I could go to medical school. That graduate school was somehow a softer entry into the world of professional science. [18]

This process of reviewing one's options was a serious effort, requiring much thought and time. It began with an often vague sense that something was amiss. Those who were employed found their work lacking in direction or challenge; those who were homemakers were ready to make a commitment to work. And this all occurred within an atmosphere conducive to such change, notably the women's movement. In the end, regardless of the disparate paths taken, these women decided on medicine as the most satisfying of the possibilities available to them. Medicine, for them, was the outcome, in a sense, of the desire for change.

Pattern II: Medicine as the Only Career Option

For the remaining respondents, the decision for medicine, rather, was the precipitator of such change. Typically, this second category of late starters into medicine were individuals who had made a commitment to an occupation, other than medicine, at an earlier time. They became disillusioned, not so much with their chosen occupation, per se, but with the nature of their work. Medicine seemed to be a logical progression of the type of work they were already doing. So, unlike the first category of late starters who considered medicine as

one of a number of options, the second category considered medicine as the only option. The nurses in our sample provide a good example of this.

As we have seen, during the 1950s and 1960s women were encouraged to enter nursing. Despite such external pressure, nursing turned out to be a satisfying and challenging career for those in our sample who chose it. Largely, its appeal derived from the ability to "work with people" as well as "the demanding nature of the work." Two nurses clearly preferred the "surgical service" because it was "fast-moving," a "very busy ward." One explained:

I always liked surgery better than medicine. . . . You get to do things--work with pre-ops and post-ops. More emergency types of things, where you get very involved. And you had to know what you were doing--quickly! [28]

It is also apparent that the more nursing was linked with medicine and medical training, the more appealing it became. Yet, not one nurse recognized or articulated the association between that aspect of nursing and the decision to pursue medicine until much later in their career:

When I would do histories and physicals, there's a nursing history and physical, and usually it's a simple thing you can check off. But I used to do the histories and the physicals like the physicians would do. I would ask all the detailed questions. One time, one of the house officers said, 'Who is this Miss _____? Because whoever she is, I could just copy her history and physical. . . . Even then, I didn't realize I was really going to push myself to go to medical school. [5]

Another nurse explained that at her hospital, "nurses were included in the educational process of the house staff a lot." "So," she said, "I remember going to lectures that the cardiologists would give to the medical students. We were encouraged to answer questions and that kind of thing. And the reports that nurses gave to each other

were of very high quality."

The positive experiences these nurses had, and their close association with the medical profession, if anything, served to reaffirm their dedication to the nursing profession rather than to provoke a desire for medicine. At least, this was true for a few years. Rather, they were committed to advancing within the nursing profession --either by doing graduate work and/or by moving up the nursing hierarchy through a series of promotions. Usually this meant leaving their clinical responsibilities, specifically direct patient care, in favor of more supervisory, administrative, and/or teaching positions. This, however, created a conflict for some:

I saw myself as somebody who would probably be an administrative nurse. And for some reason, the more I got into it, the more I didn't like it. [51]

She explains:

I felt like the things I liked to do, which were sort of the nitty gritty of the work of making people better, you can't advance from and get any stature. There are clinical physicians who are respected for their skills and people ask them for consultations. But they don't do that with nurses.

Another nurse, who was a teacher rather than an administrator, had similar feelings. And it was during that time that she thought about medicine:

I liked nursing very much. I was head nurse, and left for one year to work as an in-service instructor. Then I taught in the school of nursing. I decided when I was teaching that I was . . . definitely going to go into medicine. [29]

She was "highly mocked" by her colleagues, as she explains:

They said to me, 'Why do you want to do a thing like that? You're an excellent teacher. You like nursing. You're very good. Why do you want to inflict that on yourself?'

Her reply was simple:

One reason. I really liked patient care. And I liked being with patients. . . . So I thought that I would like to have something that I could do that would be very stimulating and progressively learn more, and do something that kept me near patients.

So, the decision by nurses to pursue medicine was in a sense a means of continuing the favored duties of nursing, specifically direct patient care, while also being accorded the respect and authority they felt they deserved.

Teaching, in many ways, parallels the situation of nursing. Teachers, like nurses, as they advance in their careers, become increasingly removed from the one-on-one contact with their charges. And they, too, become frustrated by this. In addition, they are prevented from effectively carrying out their responsibilities because of bureaucratic constraints, another source of contention.

One male respondent, who worked with socially maladjusted children, became increasingly committed to his work as time progressed. "I was going to do that forever," he said. "I thought I was making a small, but significant contribution." But funds dried up, he explained. "There was no more money to do what I thought had to be done":

In order to take care of these kids and not merely to junk them requires a considerable expense, more than it requires to educate normal children. . . . I found myself more and more in the boys' bathroom. That's where the education was going on in terms of who was dealing what, and who was having what weapons, where, and who was using what on whom. [12]

So he started to move into administration. But "moving up meant moving away from what I really liked to do," he said.

Another respondent, who taught physical education at the high school, then junior high school level, had similar problems with teaching. Having majored in education during college, he saw teaching as a permanent career. "When you get the positive response from the kids

that you are working with, it's great. There is nothing better than that." Although he worked in a "fairly good school," unlike the previous respondent, there were "a great many behavior problems" there, too. "I got tired of diving under and over tables to separate fights, and disarming kids, and things of that kind. I was at a point where I wanted to teach, but I was not being allowed to do that." He moved into a more administrative position, as assistant principal, but this served to make him more dissatisfied:

I felt I was in limbo. I was getting nowhere. I wasn't satisfied with what I was doing or getting out of the system. [38]

Over and over again, teachers were frustrated by the behavior problems of the children and their lack of motivation or interest in learning. "I was disappointed in what teaching meant," said one respondent. As teachers, they believed they were unable to make a difference in the lives of their students, either in terms of providing factual information or in terms of changing behavior or attitudes. "I was disappointed with the fact that I could only get to a small percentage of the children," said one former teacher.

Medicine came to be seen as a more realistic "agent of change." This is profoundly illustrated by one woman who was first a teacher, then an educational psychologist and counselor (on an administrative level):

I read this book and the quote in the book was essentially: It's terrible when a man is poor because he is condemned to a life of stint and is cut off from enjoying a life that is larger than that. And it is terrible if a man is ignorant, because he is essentially cut off from the commerce of other people's minds. But it is worst of all when a man is unwell, because if he is unwell he can do nothing about his poverty and nothing about his ignorance. [10]

"And that really struck home with me," she said. "It was more or less

my interest in how to maximize a person's potential, to create an environment that allowed them to maximize their potential, that made me think that health was the answer and that medicine was the tool."

Another respondent, a former rehabilitation counselor, became frustrated with her work much as her peers in teaching and nursing had. In her first job as a counselor, she worked with the aging handicapped trying to place them in new careers. But her later work became more supervisory without much opportunity for direct counseling of clients. "I was mostly just supervising job field placements, getting people to a certain address and back again. That was it. If they had problems, they just didn't consider it appropriate to bring it up. I wasn't their counselor. I was their job placer." She began to realize that the types of things she was hoping to get from counseling were, in fact, part of medicine. "When I think about medicine, what I think I will be doing is I'll be a change agent." Now a medical student, she explains:

People are going to come to me and hopefully I will be part of watching, or part of their changes over time. What I see the whole interesting part of medicine being, is having somebody come to you when they're well and then having them come to you when they're sick and you see all the things that have happened. [13]

What these nurses, teachers, and counselors shared was a feeling of impotence--that they could not effectively change, or better, the lives of their clients/students in ways for which they had been trained, not because of any personal shortcomings, but because the system in which they worked presented obstacles. It was a system which was forced to function with inadequate staffing, funding, and support. And one which encouraged capable workers toward upward mobility, hence removing them from direct, one-to-one contact with people, into

supervisory or management level positions.

Medicine was perceived as a more effective mechanism for doing what they did best--work with people--but in a way which might maximize the impact they could have. Physicians, unlike other helping professionals, were believed to have the "power" or "autonomy" with which to change things.

While those who emphasized the importance of working with people hoped to enhance that aspect of their work through medicine, another set of respondents hoped to add that dimension to their work through medicine. Here we have respondents in the basic or applied sciences working in academia or industry (for instance, engineers, chemists, biologists, computer programmers), who spent their time primarily in laboratory settings, dealing with mechanical apparatus and equipment rather than with people. "I wasn't having any contact with people," said one design engineer." "I wanted to do something that would be more directly involved with human beings." Another, a chemistry teacher in a university, felt that medicine would combine her "scientific interest" with a "need for active people-oriented" experiences. The gist of these concerns was repeated by several others in similar situations.

Intervening Factor: The Illness or Death of a Loved One

During the process of considering medicine as a career, a relatively small number of respondents, six in all, shared an experience which, because of its impact on their decision-making, is worthy of mention here. That is, they witnessed and were involved with the illness or death of a close friend or family member. In itself, this did

not precipitate a decision in favor of medicine. But, in combination with other factors, it "gave the final push," or "crystallized" the decision, according to respondents. For a few, it fostered a "renewed interest" in medicine; for some others, it released or awakened unconscious motivations. This intimacy with illness or death acted on our respondents in one or more ways. One theme which emerges is the helplessness or frustration they felt.

One woman, whose father was ill, expressed this:

There was a sense of frustration, of being on the outside, of not knowing what was really going on. Just not knowing everything that I possibly could know about what his illness was like and ultimately what he died of. . . . It was a very helpless feeling. [18]

One means of dealing with this feeling was "to intellectualize," as one woman explains:

[My fiance, a chief resident in urology] came down with Hodgkin's disease. We went through all of the chemotherapy and the surgical procedures. And, I guess as many of us tend to do, one of our ways of dealing with high stress situations is by intellectualization. And the only way you can adequately do that is to find out everything you possibly can about whatever's going on. So I found myself immersed in medical literature and medical conferences. [49]

Being a physician, that is, having medical knowledge, would allow one to be "in control" in such situations; "the feeling that I could do something," said one respondent.

A few respondents were "angry" or, more strongly put, "apoplectic" at the physicians they encountered during this time. This anger was generalized to the medical profession as a whole. They felt that, in a similar situation, they, as physicians, would do better in terms of interpersonal relations as well as clinical judgment. One man, whose daughter suffered a birth defect due to an accident by the obstetrician, explains with great emotion:

At that point, I guess I handled my rage by becoming more constructive. What I did was, I said if I diverted all my energies to a thing that I am most angry about--which was the accident with my daughter--I'd probably be an awful goddamned good doctor. From that moment on, I became absolutely determined to be the best doctor I was capable of being. [12]

Another effect was to make respondents more aware of their own "mortality": "It restarted, or at least brought to the surface, all of my beliefs about how I wanted to spend my life if things had been different," said one woman, whose childhood dream had been to be a physician.

The discussion thus far has focused on the process of choosing medicine as a career late in life. It began with a consideration of the factors which precluded such a decision at an earlier time, notably financial and social constraints. With medicine an unrealistic option, respondents took one of two basic paths; they drifted into other careers, with varying degrees of commitment; or, in the unique case of women, they opted for the primary role of homemaker. At some point, they all reached the conclusion that earlier choices and commitments were no longer appropriate. One set of respondents, the women, caught in the midst of the women's movement, began to question their identity. As they searched for meaning, typically in the form of a career, medicine was singled out as the best of the available options. The second set of respondents, more firmly entrenched in the occupational sector, though committed to earlier choices, no longer found their duties and responsibilities rewarding. They looked for ways to maximize the most desirable aspects of their work, and medicine was the only logical choice, for them.

In the following section, we will examine "why" medicine was

chosen as a career, as opposed to the previous concern with the "way" in which it was chosen (see Rogoff, 1957, for this distinction).

The Appeal of Medicine

People-Oriented

Work which is oriented toward people has several dimensions which appealed to our respondents. Some mentioned simply the "interaction" between the doctor and patient, or the "interpersonal relationship." Our respondents feel that their personalities favor such work. They describe themselves as people who are "outgoing," or "good" at working with others, who "get along well" with others; and moreover, who "like" or "enjoy" such interaction.

They place a great deal of emphasis on being "actively" involved with people--something which medicine, as opposed to pure science or research, provides. One woman with a doctorate in chemistry felt her talent for working with people would be wasted in a laboratory setting. "I am very talkative. I am very extroverted. . . . Why waste this in a lab, where I have to be silent most of the day?"

Yet, the practice of medicine allowed one to maintain an interest in science: "The kind of things that started to make sense [about medicine] was the ability to work with people, but also with the sciences--to combine both of those things that I was good at, that I liked." Another said: "I think it is a good combination of the humanities and science, for people who are outgoing and like to work with people. I think it's particularly appropriate for who I was."

Medicine not only provided an opportunity to work with others, but to "help" or to "provide service" and "to take care" of them, as

well. This was an essential issue in the choice of medicine as a career. Again, medicine is compared with science or research. Involvement in research alone became frustrating because of the delayed gratification:

[Being in a laboratory] you have to wait for such a long time to find out what is going on. . . . Yes, it is a grain of salt and it is pushing science one step further, but I have no communication with anybody. I don't feel that I am helping. [47]

Another respondent, with a degree in classical Greek, expressed a similar feeling:

When I thought about [medicine], it seemed sort of perfect, because it offered something that seemed the very opposite of what I had been thinking of doing before in academics, in that it was direct and personal and you did something, and you saw the results right away. . . . I mean, the person was sick, and you were--I mean, this is sort of my rudimentary thinking--you made a diagnosis and you did something, and they got better. And I felt that direct, immediate feedback and that kind of direct contact with people, which is really what I wanted now, was ideal in a lot of ways. [9]

Respondents were anxious not only to "help" people, to be "needed," but to actually be able "to make a difference" in patients' lives. Medicine afforded the opportunity to "help people who other people weren't interested in helping . . . in a potentially meaningful way. To make a difference. To make change," said one woman. Another agreed that medicine "seemed like it would make a difference. It was a profession where you were affecting people at a very important moment in their lives and hopefully making an effect."

This attitude suggested a "political awareness" or "social consciousness," but on a "daily and practical level," a "personal level" rather than a "global" level.

Professional Orientation

Related to the desire to help people was the feeling among

some respondents that the medical profession, in its current state, was not functioning effectively. One respondent went into medicine precisely because she "hated the medical profession." And some became physicians with the specific intention of helping people, but in a broader sense, hoping to change the nature of the profession, as well. One woman felt that compared with most physicians, whom, she said, "I hate," she could do medicine in a "more humane way." The key, she felt, "was essentially respect. . . . To get through the process and not think that my time was more valuable than other people's time." In addition, she believed it was important "not to lose touch with a sense of my own mortality, the way so many people who go into medicine do." And here she attributes her potential contribution to her advanced years:

When you go into medicine in the traditional route, you're at an age when you're not really very much in touch with your own mortality. The pressures, the work load are such that I think it is very easy to avoid dealing with that aspect of your own life. And it's neglected in patient care. [28]

Another woman felt she, too, had a special contribution to make, due in part to her early experiences with children:

When I was in high school and baby-sat, I was very much aware of the ways mothers related to their children. . . . I continued to baby-sit even while I was in my early twenties and a college student. By that point, I was not only observing what they did and how it worked, but I was interested in what didn't work and why it didn't work. [1]

When she had children of her own, she continued to observe her own behavior as well as that of other mothers:

I felt a lot of mothers that I knew and saw, particularly with their first children, did an awful lot of things based on old wives' tales and that there was no one who could help them out. They were very unsure in a lot of areas and had very little experience. And they turned to the pediatrician who I felt often didn't fulfill these functions very well.

And so, she said: "This is where I started to think of myself in that role, as a pediatrician, particularly."

One woman, a nurse, was treated during an illness by a physician who disappointed her because of the "manner in which [she] was treated: . . . I sort of resented that and then I started to think more about how people were treated by their doctors. I decided what I would do."

Autonomy

In addition to what respondents felt they could do as physicians in terms of patient care, there were characteristics of the profession itself which were attractive. "Autonomy" or "power" were terms often mentioned to describe the role of the physician:

Medicine was seen as a career in which I would have a reasonable amount of autonomy, not that you really do in medicine or any field [laughing]. There is always someone that you have to cope with, in power, above you, but it seemed as if it might provide more autonomy than many of the professions I had considered. [23]

Two respondents, who had worked in a hospital setting prior to pursuing medicine, were particularly attuned to these issues. One, for instance, who had worked as a switchboard operator during high school, was the one responsible for "calling doctors in when there were emergencies." This allowed her to gain considerable insight into the role of the physician:

I got the feeling when I was working in this hospital that doctors could do anything, but nurses had to wait for the doctor to say they could do this or that. I didn't want to have to depend on somebody else to make my decisions for me. [32]

She recalls a particular incident that influenced her later decision to pursue medicine, rather than nursing:

. . . A woman was in labor and she was just about ready to deliver

the baby. . . . The nurse actually had to delay the labor until the doctor arrived. . . . At that time [1950s], nurses were kind of restricted in what they could do.

Two former nurses confirm this attitude and used it as a reason for switching to medicine. "Nurses are not free to make decisions because they do not have complete knowledge," said one. "Even if you are smart, you are not the primary person." These two attributes--skill and authority--were similarly important to another former nurse, as she described the appeal of medicine:

Being in charge of a patient. Having the training to take care of a patient the way I think they should be taken care of. The power, if you like. But being trained to do it, not just common sense. Being trained to take care of people effectively. And to be the person to take care of them. [Emphasis by respondent]. [15]

The skills of a physician are additionally important because they are perceived to be "universal," which allows for "mobility." A third-year student explains:

To me, [medicine] was a profession that allowed what I felt would be the acquisition of skills that were needed all over the world. I could go anywhere with those skills. [21]

Another respondent elaborated:

I am mobile. I can take my body of knowledge with me and go to Paris. And if someone falls in the street in Paris, you know, I could know what to do as well as in New York.

In addition to, and related to, such mobility was the perceived flexibility in lifestyle that medicine would provide. On a practical level, this included "hours of work." Income was rarely mentioned, and when it was it was couched in terms of "financial security" rather than the amount of money which could be earned. But more important was the range of interests that medicine would encourage--the "variety of fields," the ability to "teach," "to practice," and "to work for as long and in whatever capacity one wished." "Your mind would always be

working. It would be different rather than being the same day after day," said one respondent. The overall "autonomy" provided by medicine was aptly summarized in the following remark:

. . . doctors were independent people. I'm the kind of person that likes to work alone. I don't like to work for somebody. I like to be flexible. Also, I like to have the opportunity to do different things. [33]

Challenge

The "intellectual" challenge presented by medicine was particularly attractive to some of our respondents. They were, as we have seen, unfulfilled in previous careers or endeavors. For instance, a pharmacist endured training which he believed was "more difficult than medical school," yet did not have an opportunity to use it "filling prescriptions and waiting on customers." "All this knowledge and I just wasn't using it," he said. A former police detective remarked that he "had an intellectual itch that had to be scratched." Another, a woman, felt that she "was not working up to [her] potential." "There was a lot more I could offer the world and a lot more that I could do for myself," she said.

But perhaps more striking are the respondents who saw the process of pursuing medicine, rather than the practice of medicine, as the real challenge--at least for them. It became a "test" of commitment. "I had never dedicated myself to anything until I started working toward getting into medicine," said one respondent. "Medicine was something I could really be proud of," said another:

It's the first time I wanted to become an expert in something. Before then, I had not really gone all the way. Sure I had studied education, but I didn't go for a Master's, or any kind of degree. I didn't want to. [Medicine] was the first thing I really had a feeling that I would want to do something with. To really know it rather than to just sort of dabble. [30]

In part, this was a test on one's ability to perform. If we recall, many of those we interviewed grew up thinking of medicine as unattainable. Certainly there were financial constraints involved. But in addition, it was perceived as intellectually unattainable. "I always felt that doctors were the smartest people in the world. They have to know everything," said one woman. But then, through a process of growth, maturity, or experience, these same respondents came to see physicians as "human," not as the "gods" they were purported to be. ". . . I started looking, and being realistic about it, and seeing that there were doctors who knew things and those who didn't. There were things that were just not to be known. There are no answers." As respondents gained a more realistic approach to medicine, it came to be viewed as within their grasp. But this is not to say that medicine was no longer perceived as difficult. It's just that it became something they now felt capable of doing. "I did want something that I could be challenged at. And at that point I became ready to admit that I had the brains to do this."

To accomplish this goal when all odds were against you, because of age specifically, became an even greater challenge. And this created more impetus to strive. "It was a challenge. It looked like it was impossible to do. So, why not try."

One respondent explained:

I think more than anything else, I guess I always felt that things had come easy to me. That I never really put myself on the line. It was pretty hard to get into medical school with the kind of background I had, after having such a lousy index and everything. Part of it was thinking of the most difficult thing for me to do--getting into medical school. So, I decided to try it. [27]

It was a test of one's initiative, as well. One woman first

followed the advice of her parents and studied education in college. When she no longer liked teaching, she switched to computer programming because it was available. Medicine would allow her to make a choice of her own and to test her ability. "I thought, if I could do this, boy, wouldn't that really be something. It just seemed so far out from anything I ever thought as a child, or that my family would ever think of for me, that it would be a tremendous accomplishment," she explained.

In addition, it would provide a means of personal growth and development. "I just felt I had to do it. I never thought it was anything I could do. It was just a point where I was at a dead end and I needed to really mature some more and get myself some more confidence. I got to the point where I really wanted to prove this to myself."

For two women, the notion of challenge was critical, but they did not apply this to the idea of medicine until later in their search, and only serendipitously. One, an anthropologist, who spoke earlier of her fear of science, "kept toying with the idea of taking science courses . . . just to see" if she could do it. Medicine never occurred to her at this point. She explains that "the more I started thinking about it, and the more I kind of dabbled, one course at a time, I realized I could do it and I was winding up at the top of my class. I loved the challenge, I loved the success--something, here, I was afraid of my whole life":

It was a surprise to me that I could do it. And once I realized I could do science, that it was within my grasp, I realized that medicine, then--that that was the only thing--my fear of science had stood in my way of going into a scientific field like medicine.
[21]

Another woman, a programmer, realized that her work did not provide her with enough contact with the medical field which she particularly

enjoyed. She decided to enter the field directly, as a nurse--"the only way I could do it," she said, because of her trouble with chemistry during college. Because she had been away from school for ten years or so, the nursing school admissions committee was apprehensive about her ability to do well. She agreed to take a test, in organic chemistry, to demonstrate her ability. However, she had never before studied this subject:

I studied on my own. When people heard that, they said, if you can do that on your own, you really don't have a problem with chemistry. I just felt better about myself. My self-esteem rose. Thus, there were all sorts of questions about how I would react as a nurse, because I feel like I am very independent. . . . So, then, I started to think about medical school instead. [36]

Preparation for a Career in Medicine

We have followed our respondents from their earliest career goals, choices, and commitments through the process of considering medicine as a desirable alternative. The decision to pursue it, as opposed to merely thinking about it, is only the first step in a long process, however. And it is one fraught with risk and uncertainty for all recruits, but particularly so for the older recruit. Older applicants to medical school are rarely considered appropriate candidates, as we have seen (Chapter 2). So, once the decision to pursue medicine is made, the chance of accomplishing that goal is less than the chance of failing. The risk of failure would not be as problematic if all the older candidate had to do was fill out the application forms and wait for the letters of acceptance or rejection from the medical schools. Surely the time and financial investment (for application fees and interviews) would be substantial, but most likely, manageable. And, undoubtedly, a rejection would be emotionally devastating. But, given

the reality of the situation, for all practical purposes, these are individuals who for the most part have completed their higher education (both undergraduate and graduate), have acquired skills and experience in various occupational sectors, and are employed or employable. The risk of rejection becomes more significant, however, when we consider what must take place even before application to medical school can be made. The emphasis placed by medical school admission committees on a strong science background, outstanding academic performance, and high MCAT scores, is well known. In this respect, older recruits are clearly at a disadvantage. A fair number of our respondents, fifteen in all, did have substantial academic training (at the undergraduate level) in the basic sciences. But less than a handful of these had all the prerequisites needed to be eligible for admission to medical school. The remaining respondents, nearly all, had little or no previous science training. Hence, virtually all older aspirants had to take pre-medical courses. A few needed only one or two to fill in the missing requisites. Most others, however, needed the usual thirty or more credits, including science courses never taken, and those repeated to compensate for poor grades received during college. And, in a few exceptional cases, respondents had to first complete their undergraduate degrees, having dropped out years before, or having never attended.

One woman described her initiation into the premedical process:

The first thing I did, since I didn't even know where to get information [about admissions requirements and procedures], was to call up the medical schools. . . . I called the dean of admissions at [a prestigious New York school] and the secretary said, 'You're nowhere near getting into medical school.' I said, 'Well, what do I do?' They said, 'We'll send you a catalogue and that will cover the courses you need.' And I said, great. Step One. [13]

Her enthusiasm began to fade, however, when confronted with the fact:

So, I got this catalogue. That was something tangible, that I was holding in my hand, like I was actually going to get there. And that was the first big disappointment, because I looked and saw a year of chemistry, a year of physics, a year of organic chemistry. A year of this, a year of that. It just seemed like it would be so long.

Having to complete the premedical requirements was indeed a lengthy process. For the lucky few who needed only one or two courses, this could be accomplished within one academic year, or perhaps a summer session. The rest, who needed the full range of courses required as many as three or four years to complete the process. And, since all respondents were in their mid- to late twenties, or older, at the time they began their premedical work, each additional year prior to application decreased their chances of getting accepted. Time, therefore, was a critical factor, but one which was complicated by the life situation of our respondents. More than one-half were married, and nearly all of these had children. The men who were married were likely to be the primary financial support for the family. The married women were likely to be in charge of the home and children. Those who were single were financially self-supporting. Thus a return to school for all respondents, married or not, posed serious practical problems. Ideally, premedical studies, because of the rigor and time demands (for example, laboratory work as well as didactic lectures), favored full-time study.

It's a world of difference if you are just simply a student. Every day, you are just one hundred percent a student. This business of working part-time and taking courses part-time or working full-time and taking a course here and there is just not the way to go about it. Your energies get divided, completely divided. There's something about the concentrated effort and just being sort of immersed in a certain type of thinking. It just made all the difference in the world to me. [44]

But not all respondents were fortunate enough to be able to pursue their studies in this manner. Those with family and/or

financial responsibilities were forced to work, and to do their course work on a full- or part-time basis. The frustration of this was described by a man with a wife and two children:

I was very discouraged. [Schools] were looking very strongly at the grade point average. And I was a little bit bitter because I said, well, I have a B+ average, but I am working full-time, going to school full-time. Having that responsibility, I felt that I should be given some consideration, but I knew deep down inside that I wouldn't be. And I could see the results, because most of my friends didn't have to work, and they had support from their parents, and their grades were a little bit better than mine. So, I became a little bit envious, and I said, well, if I had to do it again, certainly I never would have gotten married, wouldn't work, would just go to the best school possible and study twenty-four hours a day. And that way, I knew I could compete. [39]

Many respondents shared this frustration. Married or single, they needed an income to survive and so nearly all were forced to work at least part-time, with many continuing to work full-time. Some were able to shift their work hours to accommodate their studies. One former teacher became an administrator of a child care institution, working at night. "Those were totally crazy days," he said. Nurses were fortunate to have jobs which allowed similar flexibility in terms of hours and/or days worked. One nurse had a job that permitted "overtime a lot," so she was able "to save hours" and "vacations" and take courses "around the city at whichever school had the courses the hours I could be there," she explained. In one year she managed to complete five courses. She described her schedule as "wild," and from the following example we can see why:

I would go all the way to [a city college] in the Bronx to do the second part of chemistry. This was at night. Then I went to Brooklyn to some college out there because they had Physics I. I stayed there to do Part II. Then I saved all this overtime and vacation so I could take organic chemistry at [a private college] because it was a whole year in two months, going every day for two months in the summer. So that's how I did my sciences. I took a full year, and I worked. [5]

Another nurse stopped teaching because she needed more science courses and couldn't do them at night. So she resumed clinical nursing, on a part-time basis, working "all kinds of crazy hours--weekends, evenings, night shifts," and took her courses during the weekdays. She managed to take Part I and II of organic chemistry in one summer plus having a job--something one premedical advisor told her "nobody could do."

"That was absurd, I told him. Anybody can do what they feel they want to do!"

Perhaps that attitude is the key to the successes we witness. These individuals were a highly motivated, committed group. Medicine was the goal they sought; clearly they were willing to suffer enormous hardship beginning with the premedical years to attain that goal. This was probably the most critical phase in their career pursuit in that it would essentially determine their fate. To fail at this stage meant to abandon their goal. This initial phase of testing one's ability in the sciences was described by one respondent as going from "fantasy to reality." Organic chemistry was often used as an indicator of success. It was the course which purportedly separated "the men from the boys," as this man explains:

It was the symbol of whether I could really do it. . . . This was a test. Now, more mature, with a green light on a career decision . . . how would I do? If I did poorly, then maybe my fantasies were inappropriate or unrealistic. [41]

Similarly, another respondent expressed her fear:

The thing that scared me was whether I could do it. Could I really pass the sciences? . . . It really scared me because I had never really done the sciences. And I didn't know if I could do it. So it was like taking a big risk. [9]

Some of those who were unfamiliar with the sciences started slowly, by taking one course at a time, or choosing non-threatening

courses, like botany, as a first selection. A few were lucky. Not only did they "love" the sciences, but they did well. "I really had a great time," said one. "I studied real hard and had a great time." A few others found the transition a bit more difficult:

I think the hardest thing was just to realize that I could do it. Just to start. To begin. And I started very slowly. . . . There were a couple of classes where I started and dropped out because I felt confused the first two weeks. That was very painful, because here I had the goal of medicine in mind and I looked like I couldn't get through botany [laughing] or physics. How could I be a doctor if I couldn't understand this? [21]

Those with little or no exposure to the sciences had to become familiar with an entirely new language:

I found it very difficult. I didn't have the background. Starting with basic chemistry I, I had a terrible time. I found out that it was an absolutely different language. The students in my class that had it in high school and college certainly were prepared. My first couple of exams, I did horribly. And I was very frustrated. But I was very determined. . . . I found out it would take me maybe four hours to do something which it took the other students one hour to do. And I had to go back and review a lot of things. But I did get a B on my first chemistry exam, which to me was a milestone. [39]

In addition to a new language were new tools. One woman described her experience with a slide rule, "something which I had never heard of before. . . . My first test, I got every answer wrong. What happened was, I had done some of the work right, but had used the slide rule wrong. It was the first time I used it."

Respondents were continually struggling to maintain excellent grades. Grades were the one thing they had some control over, unlike their age, which was a pre-existing obstacle to medical school acceptance:

I figured I had a very minimal chance of getting into a medical school, from what I had heard. . . . The only chance I had would be going to the best [premedical] school in the area and getting all As. [33]

The emphasis on grades was a major concern. "You had to get As," was a common refrain. "There was no choice," said one respondent. "You couldn't take chances." Older students, because of their age, had to be "a little bit more obsessive" than even the typical premedical student. "I felt if I didn't get an A in everything I took, there was no way I was going to get into medical school." One woman felt that because of her age, her application had "to be perfect. Everything I did had to be perfect in order for them to look at me. That was hard to live with."

What allowed them to persevere? The fact that medicine was so important a goal. And fortunately, despite difficulty in adjusting to the sciences and the demands of premedical study, most enjoyed what they were doing. They were "serious" about their work, as contrasted with the lack of commitment and direction demonstrated during college. The premedical course work was more than a "means to an end" for some. It was "exhilarating." One man explains:

The first day I started, I just knew I made the right choice. I don't think I missed more than two classes in the entire four years. . . . Suddenly, I wanted to be there. [27]

The feeling that medicine was the right choice was shared by all, without exception. But their confidence in achieving this goal was less clear-cut. Only a handful felt that acceptance to medical school was a certainty. One was able to state, emphatically, "I never had any doubts." Another said: "I thought I had really matured and was ready to take on the challenge. I went into most of the interviews very confident that I would get accepted. One woman, who "had a lot of doubts at different points along the way," basically remained optimistic: "I had a conviction that I would be good and that they would make

a mistake not to take me."

At the other extreme were a small number who were somewhat pessimistic. One man, even though assured by others that he would get accepted, said: "People told me that I had nothing to worry about, but I did not feel confident." A woman, when asked if she felt confident, replied, "Pretty nervous!" Overall, however, the feelings were somewhere in the middle. A few individuals fluctuated in their self-confidence: "Some days I knew they absolutely had to take me. And other days I knew that no one would ever want me," said one woman.

The fears were not totally unrealistic, given the actual difficulty of getting accepted to medical school. Some older recruits, however, were naive about the process. One former nurse remarked: "I didn't realize it was terribly difficult to get into medical school. I was going to say that had I known, I wouldn't have tried so hard, but I didn't know." Another woman realized the difficulty only after taking the MCAT exam. "The first MCATs I took, I just walked in without having premed or anything. I figured I could handle it and I was real surprised. I didn't realize you had to study for these things."

Such naivete may be explained in part by the fact that most older recruits were not part of the "premedical subculture" that encompasses the typical medical applicant. They had been out of college for ten to twenty years; and those who returned to take premedical courses did so usually on a part-time basis. They tended to remain aloof from other students as well as faculty. Thus, they did not have access to the formal counseling by premedical advisors or the informal sources of information obtained from peers regarding the admissions process.

Some students, though, were attuned to the system. And they

recognized that studying was not the only important factor. "I was competitive. I had excellent MCAT scores, but I knew there were many people who had excellent grades and scores." Another respondent talks about what he refers to as the "injustice" of such a system:

I've always known people who get all As and terrific scores. . . . on the football team, played concert cello . . . and weren't getting into medical school. Whereas, some who couldn't work their way out of a closet were getting in, so I knew it was pure chance. [17]

Some of the respondents were more specific about the cause of their apprehension. Age at matriculation was perceived to be a major factor in being denied admission:

At the beginning, I was sure--I thought--I should be a good candidate. I didn't realize to what extent age was going to enter into this. . . . As I kept getting those rejections, it became clear to me that it was going to be tough. [43]

One respondent realized this even before he received any rejections:

No. I was not confident that I would get in. . . . I realized that I was significantly older and had a big handicap. I had read all the data showing the decrement of acceptance rates with age. [25]

The age issue was particularly frustrating for those who believed they were qualified in all other ways. "I knew I had the ability. I just didn't think that any medical school would see that because of my age," said one woman. Some of the women in particular felt they had a double axe to grind--age and sex. One former nurse was told by several medical colleges that because she was female, and medical school was difficult, she probably couldn't succeed. Another woman, with Ph.D. in science, felt that the combination of her age, sex, and former degree would act against her. On the contrary, some women felt that it was "prime time for women to go to medical school." And we will see (Chapter 8) that older women do fare better than their male peers in gaining acceptance.

While it is clear that most older recruits that we interviewed

expressed some degree of apprehension regarding admission to medical school, they were not daunted in their efforts. They described themselves as basically "stubborn" individuals. "Usually, if I start something, I am committed to it," said one woman. According to another, "Once I start something, I refuse not to finish it."

Even when discouraged by others, they persisted. For instance, one woman was told by a premedical advisor to reconsider her plans:

Oh, I thought about it and realized that what she had to say was probably so and that I would have a difficult time. But my feeling was that I did not have any other direction at that point that I wanted to go into, and that if I did not try I would never gain it. [23]

Confidences seemed to be raised with successes along the way:

Oh, it was when I started going back to school and being successful at it that I started to think that maybe I did have a chance of getting into an American school. Before then, I figured it was hopeless. [30]

For some, it was simply the desire for medicine that kept them going:

"I was very hard-headed. When I make a decision I work very hard until I get it. I was headed toward medicine. I didn't want anything else. I knew I could make it if I tried hard enough. And I was not going to change my mind."

For one individual, the quest for medicine became an "obsession," she said:

I was determined to be [accepted]. I realized it was very positive to say, I want to go. I'll go to the Philippines if I have to for two years. It became quite an obsession with me. And I think you have to. It seems like it is the only way you can get in, by being obsessed, doing all you can. [15]

Another, a man, talks about a "compulsion"--"that once you make the decision, you have to see it through."

Without the belief they could make it, many felt that they

would have given up, as illustrated by the following remarks:

I felt real optimistic. All it would take was to get a B on an exam instead of an A, and I thought, 'Oh, no. I'll never get into medical school.' I was optimistic, though. I never would have made it through if I hadn't been. [21]

I remember as a kid, that the next step I took, I thought I would absolutely die, you know, dead. But you take it, you know, and you take the next one, and the next one, and the next one and from there there's no stopping you. . . . You know you can make it. That's why I decided I was going to go through with it. [12]

The determination was so strong that the mere thought of not getting accepted was often repressed, or postponed. "It was something I couldn't bear to think about. My feeling was just--I'll think about it later. . . ." said one respondent. Another admits that she was "deluding herself" by refusing to consider failure. But she said, "I couldn't face the possibility of not getting in. I wasn't being very realistic, but I couldn't even look that far and think what might happen."

Hence, many respondents refused to seriously consider alternate plans if, in fact, they were denied admission to medical school. This is dramatically illustrated by the following comments:

It was essentially my determination that it was going to happen that I was living on. And I wasn't really relaxed enough about it to be able to sit back and say, 'What am I going to do if it doesn't?' . . . I used to go to school until nine o'clock at night with the exception of Friday afternoon when I got out at three. And I used to work all weekend. I'd walk home from school on Friday afternoon and I'd start crying and I'd literally cry all the way home and then I'd go home and sit down and I'd do my homework all weekend. And that was the only time that the frustration and the underlying basis of despair I was able to even get in touch with. I used to deny everything. So if you said to me, 'What are you going to do if you don't get in?' I would have just cut you dead and turned away. I didn't have the strength to be able to deal with that. [10]

It was difficult for individuals who were so determined to become physicians to deal with the possibility of rejection from medical school. Most thought only in the short term. That is, the first step

would be to reapply to American schools, or to foreign schools. A few said they would be willing to reapply several times. Other careers were considered, but in vague terms and without much conviction. Some thought they would continue their education on the graduate level, typically toward a doctorate. The two fields of science and psychology were mentioned most often, and this is probably related to the amount of time already invested in the premedical course work. Yet one has a sense that this option would always be second-best. "I would have had to accept it," said one respondent who considered a Ph.D. in chemistry. "I would have been much less happy," said a woman with a similar plan. One woman, now a psychiatrist, would have gone for a Ph.D. in clinical psychology which, she said, "would allow me to function pretty much as I am functioning now." But, she adds, "I wouldn't have been nearly as happy."

Only a few spoke of returning to their earlier careers, recognizing that it would be a less than satisfactory choice.

Medicine stands out as being the best of all possible careers, as far as our respondents are concerned. "I essentially rejected everything else. People asked why I wanted to go to medical school and my standard answer was, 'What else is there?'" "I had to do medicine," said another. "There was no other choice!"

Determined to pursue medicine and virtually nothing else, these individuals must find a medical school that is willing to consider their qualifications, most specifically academic performance and MCAT scores, favorably. By the time their premedical studies have been completed, the majority are on a par with the typical medical recruit, at least in terms of grades. But one cannot ignore their special status--

they are at least five years older than the average student at matriculation.

In the next chapter we will examine the process of medical education and training, beginning with the earliest step of choosing a medical school and applying for admission. What are the special considerations of the older recruit? Given the restrictive admission criteria, how do they make their selection? And how do they compare with their younger classmates? Then, focusing on the successful applicant, we will look at the educational and training experience in terms of personal and academic adjustment. Again, the basic research question will be, how do they compare with the typical medical student?

Chapter 5

Medical Education and Training

The Choice of a Medical School

The Criterion of Age

In addition to the standard criteria for admission to medical school, such as grade point average, MCAT scores, class rank, etc.-- which all applicants must meet--older matriculants face the additional factor of age. Even if they meet the other criteria, age is apt to influence the decision of the admissions committee. The individuals we interviewed were well aware of the situation. It seems that one means of coping with restrictive admission criteria was to apply to a large number of schools. One respondent remembers applying to thirty-five schools:

I applied to every one. Money was not really an issue . . . tuition was an issue, but the one thousand dollars it cost me to apply, I figured was a one-shot deal, maybe a two-shot deal. I wasn't quite sure. And it seemed like a good investment. All I needed was one hit. [27]

This kind of "buckshot" method was not the only type of approach that included many applications. For example, another woman was very methodical in her choice of schools, taking into account a number of factors, among them age:

I actually applied to a fairly wide range. I applied to so many because my feeling was because of my age and the time being an issue, I couldn't afford to apply to a few schools and get turned down and think then, gee, I should have applied. So I essentially listed--I eliminated schools that were state schools. I made out a chart. I did it mathematically. I looked at schools that, for

instance, if they had more than 90 percent of the class in-state residents and I was an out-of-state resident, I eliminated that. I eliminated a couple of schools who essentially had no women. . . . I eliminated schools that were very, very strict on--most at the time had age limits. And there essentially was no school, there was no school that would encourage an application from anyone over thirty. [10]

Thus, some felt that because of their age they should apply to many schools with the hope that at least one would offer acceptance; others, as illustrated above, deliberately excluded schools that had stated age criteria. One respondent applied to any school that ". . . didn't say we won't take anybody over thirty."

Although age limitations varied from school to school, any mention of age became a warning:

. . . you have to look at the catalogue because they don't encourage applications from people over a certain age. [35]

. . . most of them said, We don't accept applications from people over twenty-seven. Some of them were as low as twenty-five. [10]

Another approach sought evidence of medical school receptivity and not simply the negative signs. Respondents said they looked for schools that accepted people with "broader backgrounds," or "erratic backgrounds," or who had "done other things beside the traditional route to medicine." The evidence was not always direct and explicit concerning age, however. For example, one woman said: "I applied to schools that seemed like they might be less hard-nosed, you know, sort of more alternative type schools, although that is hard to find in a medical school."

Even when applicants applied to only a few schools, it was not necessarily a calculated choice of numbers. One woman who applied to five schools said: "To tell the truth, I didn't know that people applied to twenty or thirty schools. I didn't know."

Generally, our respondents fell somewhere in the middle, with fifteen schools being the mode. This is somewhat higher than application activity among applicants of all ages. For the 1976-77 entering class, to all medical schools, 62 percent of the applicant pool filed applications at fewer than nine medical schools (Gordon and Johnson, 1978). Despite the rigor of the admission process, the fears of rejection, and the stigma of age, the majority of those we interviewed were able to gain acceptance to medical school the first time they applied. The primary goal, for most, was to get in; the particulars of the school were less important. There were preferences, as we will see, regarding location--American rather than foreign schools, and New York rather than elsewhere in the United States. But even so, the respondents were realistic. "I was disappointed that I didn't get into New York . . . but I was happy to be in medical school," said one woman. While some had a first choice among their applications (e.g., based on location, finances, curriculum), for the most part, they tended to take the first offer even if on a waiting list for a preferred school. For instance, after expressing some disappointment about not getting accepted at an Ivy League school, a woman said: "If you get a place at a decent school, you wouldn't--nobody would turn it down." Others, as well, accepted the first offer. The attitude as expressed by one student was, "Why mess around!" A small number were less successful the first year they applied, but were no less determined. They reapplied to American schools a second year (in one case, a third year as well), rather than opt for a foreign school. And even those who were successful the first time felt they would have reapplied if necessary: "By this time, you know, I was well into the whole

thing," remarked one medical student. Another, however, preferred a foreign school to the alternative of reapplying to American schools. When asked if she were disappointed about not getting into an American school, she answered: "No, once I got accepted someplace [Italy], that's it. You take what you get. You go after it."

Location of School

Because of the restrictive admissions policies of medical schools, in general and with particular regard to age, a relatively small proportion of those entering American schools each year are over age twenty-seven. It seems, then, that older matriculants are thwarted in their attempt to pursue a career in medicine. We know very little about what happens to rejected applicants, regardless of age (see, for example, Levine et al, 1974; Becker and Katatsky, 1975; Weisman et al, 1976; Radius et al, 1979). It appears that several options become available: to enter other health professions; to abandon the health area completely; or to continue to pursue medicine. A substantial number of rejected applicants whose goal is to continue their pursuit of medicine tend to reapply to United States medical schools the following year. In recent years, this number has approached 40 percent (Gordon, 1979). However, since age is a critical factor in gaining admission, each year of reapplication lessens one's chance of being accepted. For example, in the 1978-79 entering class, those twenty and under had a 73 percent acceptance rate, compared with a 12 percent rate for those thirty-eight and over (AAMC, 1980). Therefore, older applicants who wish to continue to pursue medicine may find that applying to a foreign medical school provides a more viable solution to anticipated or actual rejection from American schools. In recent years, a

substantial number of United States citizens have sought education in foreign schools. Although there is no accurate means of determining the precise number, estimates range from 7,000 to 10,000 individuals, studying mostly in Europe. Seventeen percent of all physicians practicing in this country are believed to be graduates of foreign schools; approximately 10 percent of these foreign graduates were born in the United States (Haug and Martin, 1971).

The attitude toward attending foreign medical schools varied among our respondents with the majority suggesting that they would never consider it, or, if so, only as a last resort. For example, one female who was rejected from medical schools two years in a row remarked laughingly that she would have considered a foreign school ". . . the third time around!" However, "it would be a last, last resort" [emphasis by respondent]. Fortunately, she eventually gained acceptance to an American school; whereas, another respondent in a similar situation resorted to a foreign school ". . . toward the very end" when she realized she ". . . wasn't getting in anywhere."

There are others who, to be safe, applied to both American and foreign schools and if put to the test, might have left the country to gain a medical education. As one man said, when asked if he would attend a foreign school: "Sure. Sure. I had to cover myself. This was serious."

As seriously as most candidates considered their pursuit of medicine, some saw rejection from American schools as a warning. One man said: "If they didn't want me in an American medical school, I can take a hint." Hence, he refused to consider a foreign school. One of his female colleagues felt similarly:

I had talked to one of my premed friends who had done the same thing I had, who had a doctorate in English and was the same age. We had sort of decided if we didn't get into medical school in the United States it was sort of a sign that maybe we shouldn't get into medical school. We should do something else. We used to talk about whether or not we would apply a second year and then we remembered what we said. [11]

While some might have considered leaving the country, family ties often precluded such a decision. As we will see, some married respondents, in particular, had difficulty even contemplating leaving the state in which they lived. The decision to leave the country was fraught with other problems as well. Even the respondents who had traveled in the past were reluctant to attempt medical studies in a foreign language and in an unfamiliar culture. Medical school was perceived to be arduous enough without the burden of adjusting to new surroundings in the absence of family and friends. To impose this burden on one's spouse and young children added to the stress. Additionally, the cost of education in a foreign school was often prohibitive. Tuition in some countries was higher than in American schools, as was the cost of living. Scholarships and loans were not generally available for foreign students. One woman who seriously considered foreign schools was discouraged because of the cost: "The big problem," she said, "was money. I didn't have any money and it's hard enough to go to an American school, but a foreign school without money is almost impossible." On the other hand, one respondent considered foreign schools a less expensive alternative--in the long run. The process of applying to American schools is expensive; application fees range from twenty to thirty dollars per school, as well as the added cost of traveling to and from schools for interviews. He felt that ". . . thousands and thousands of dollars were being spent with no guarantees," whereas a place in a

foreign school was assured.

Interestingly, only one respondent mentioned the quality of education as a factor in considering foreign versus United States schools. He said, "I just didn't perceive it as a good education." For most, it seems that getting a medical education was the primary goal and if it had to be done in a foreign school, then so be it. Everything else was secondary. Two of the oldest recruits felt this way. Neither ever considered an American school because of age and academic criteria. If they had any chance at all, it was in a foreign school. One of these men took his wife and two young children to Mexico, having never been there before and being totally unfamiliar with the language. The other went to Italy, leaving his wife in the United States. Both, however, had positive experiences.

In all, a fairly small proportion of the older matriculants we interviewed attended foreign medical schools. But examination of the AMA data reveals that age at matriculation is indeed related to location of school attended. While 15 percent of all physicians in the AMA sample attended foreign schools, older matriculants were significantly more likely than younger matriculants to do so (Table 1).

Table 1

Country of Medical School Attended
by Age at Matriculation

	<u>27 or younger</u>	<u>28 to 31</u>	<u>32 or older</u>
	%	%	%
Foreign	9	15	30
United States	<u>91</u>	<u>85</u>	<u>70</u>
Total	100	100	100
(Number of persons)	(1589)	(1841)	(695)

Those in the oldest group are twice as likely as those age twenty-eight to thirty-one to have attended a foreign medical school, and three times as likely as those twenty-seven or younger.

Of all physicians who attended foreign schools, most went to Europe (54 percent) and to the Americas (29 percent); 12 percent went to Asia; the rest to Canada and Africa. There are some differences, however, in the location of the school attended when age is taken into account. Older matriculants more often go to Europe; younger ones, to Asia.

Most medical students, however, are not forced to leave the country. Among the 85 percent of the AMA respondents who remained in the United States, the largest proportion attended school in the northeastern and north central states (50 percent); 35 percent went in the South, and 14 percent in the West. The region did not vary much among younger and older matriculants; older matriculants were slightly more likely to be in the South and West, younger ones in the Northeast and north central states.

There is a tendency for physicians to attend school in their state of residence. In recent years, both private and public schools have given preference to such applicants (Rolp and Williams, 1976). In our total sample of American graduates, 41 percent graduate from schools in their home state. This is more likely the case for those who attended public rather than private schools (68 percent compared with 32 percent). Younger matriculants more often than older matriculants remain in their home state (50 percent compared with 35 percent). Given the difficulty of gaining admission to medical school for older recruits, it is not surprising that they are more mobile, either by

leaving the United States altogether or by leaving their state of residence.

Although older students may ultimately be more likely to relocate, they clearly preferred to stay where they were living prior to medical school. For the physicians we interviewed, this meant New York City. Only a handful stated unconditionally that they would leave New York. This is, somewhat humorously, illustrated in the following dialogue:

(Interviewer) How did you go about selecting the schools?

(Respondent) Anybody, please take me, take me.

(Interviewer) Did you limit it to--

(Respondent) --Anybody.

(Interviewer) Did you apply all over the country?

(Respondent) Sort of. You know I applied to twenty-three places. I applied to third-rate schools in Oshkosh. You know, maybe I'd get in. [121]

Another respondent, when asked the same question, responded:

There isn't much decision involved in that. You apply to a lot of schools. I really didn't think very much about it. I just applied to any school that I thought was--all over the country--that I had a chance of getting in. [50]

Another replied, emphatically, that she applied ". . . everywhere."

Similarly, one man, who also applied "everywhere," stated that he had "no real preference." He considered ". . . anybody who'd have [him]."

Even among those who might have left New York if necessary, there was a desire to remain [emphasis mine]:

Location didn't matter. Obviously, I would have preferred to stay in New York, but location didn't matter. I would have gone anywhere in the United States. [27]

For some, remaining in New York was more than a preference. It was a

necessity, based primarily on family ties and commitments. This was especially true of the women we interviewed. The husband's career seemed to take priority even when the possibility of attending medical school might be jeopardized. While in reality it might have been feasible, though admittedly not desirable, for a spouse to relocate, it was often not considered as an option. One woman remarked bitterly: "It never entered anybody's mind to relocate. Ever. You get the point. I mean ever! Never even occurred." Another woman, when asked what she would do if perhaps forced to relocate in order to attend medical school, responded: "I probably thought about it, but not very seriously, because my husband was thoroughly settled in his position here. . . ."

Sometimes, relocation as an option hinged on the possibility that the spouse could in fact find employment in another state. One woman applied to schools in Boston, as well as New York, because it was "feasible" for her husband to move his business there. As an alternative, she considered applying to schools within commuting distance of New York, while her family remained here. However, she reconsidered after her family spent a weekend without her at their country home:

I was really miserable and I decided it wasn't worth it. Now, I had to weigh my priorities and really, my family counts and I wasn't that dedicated [laughing] that I was going to do it and kind of throw out everything else [emphasis by respondent]. [23]

Another woman, who also applied to Boston schools, was less sure that her husband would relocate:

I was totally determined to go to medical school, and I kept telling my husband we could move to Boston and he would . . . sort of go along with it. But he didn't think I was going to get in. So he would never discuss the subject seriously. [48]

Although generally women were more concerned about uprooting their husbands and children, some husbands were concerned about their

wives as well. One man applied to New York and California schools since his wife, a lawyer, could conceivably get work there. Another preferred to remain in the metropolitan area because his wife was in psychoanalysis and he didn't want to disrupt the process.

Two respondents, a man and a woman, reached a compromise by attending a nearby school and living in the dormitory during the week, returning to the family home on the weekends.

Older matriculants, perhaps more so than younger matriculants, were limited in their choice of a medical school based on geographic factors. Relocation seemed neither desirable nor practical for our married respondents and nearly all older matriculants that we interviewed were married at the time they applied to medical school. Those who apply at a younger age, however, are not likely to be married. According to data supplied by the AAMC, for the 1976-77 applicant pool, fully 83 percent of applicants had never been married. Incidentally, those who had never married had the highest acceptance rate, 41 percent, compared with married applicants, 28 percent (Gordon and Johnson, 1978).

Type of Control: Public versus Private Schools (U.S.)

Colleges and universities have traditionally been divided into two categories, public and private, although since World War II the distinction between them has blurred. Among the major sources of difference is the source of funding, with public institutions typically relying on government subsidies, while private institutions rely on private sources, such as tuition and gifts. This has implications for the quality of education provided, in that an assumption is made that private schools have more freedom to "pursue goals of excellence" because

they are less influenced by legislative and government control. Consequently, private institutions have "prided themselves" on more selective admission policies (Gross, 1974, p. 19). The United States is one of the few countries in the world in which the difference between private and public medical schools still has some meaning.

In 1961, the number of privately owned medical schools was forty-four, rising to fifty in 1978. During the same period, the number of schools owned by states had increased from thirty-seven to seventy-three, making a total of one hundred twenty-three schools (Christie, 1976; Hadley, 1980).

More than half the physicians in our AMA sample (57 percent) attended public medical schools; the rest, 43 percent, attended private schools. There are no apparent differences by age at matriculation in type of school attended. Fifty-five percent of younger matriculants compared with 58 percent of older matriculants attended public schools.

The older matriculants whom we interviewed were not specifically asked their preference regarding a public or a private school; none volunteered such information specifically. The primary factor in choosing a school seemed to be its location, as we have seen. The following discussion on the quality of schools may be suggestive of attitudes toward public versus private schools. Although not always so, private schools are perceived to be better schools, and any reference to type of school was couched in a discussion of quality.

Quality of Medical School Attended (United States)

There is no question about the existence of a hierarchical

prestige structure among four-year collegiate institutions in this country (Roizen et al, 1978). The prestige of an institution is largely determined by its selectivity, although selectivity is a relative term. One criterion for measuring selectivity has been the average college admissions test scores of entering classes; the higher the average test score, the more selective the institution. Another definition refers to admissions policies, ranging from open to highly selective. Such evaluations of prestige may not be suited to medical colleges, since applicants tend to comprise a highly homogeneous group, in terms of academic training and performance. The majority of medical school applicants are biology majors, and perform exceptionally well. Hence, there has been very little work on the quality of professional schools generally, and medical schools in particular. One study has attempted to examine the reputational standings of American medical schools as determined by the community of physicians and scientists who work in them (Cole and Lipton, 1977). It is believed that reputation has much to do with the actual quality of a medical school, although not necessarily equated with it. Reputation has consequences for students, faculty members, and for medical schools. Students' self-esteem and future careers may be affected; faculty members may be concerned about opportunities for research facilities and resources; and medical schools' recruitment of students and faculty, as well as resources, hinge on its reputation.

Since the quality of a school may have significance for one's later career, it seemed useful to compare younger and older matriculants on this dimension. However, it should be noted that at least among those interviewed, quality did not seem to be a determining

factor in the choice of a medical school, either in terms of application or attendance. It should also be mentioned that respondents were not specifically asked about this. They were asked, generally, how they went about selecting schools for application and how they determined which school to attend. Quality was indicated only occasionally. For instance, one respondent, who limited her applications to New York and its surrounding area, stated:

I don't think I had a first preference. . . . There were a lot of good schools, I guess. Maybe--Yale would have been nice. Any of the good schools would have been great. [18]

In fact, there was some feeling that the good schools would not take older applicants because of their age, per se, and their somewhat diverse backgrounds. One respondent was advised that she should apply to a "poorer" medical school because she was "too old" and didn't have straight A's." However, she refused to accept this advice?

I know that from my experience of being an undergraduate at an Ivy League school that they take anyone they damn well please, and that they took people that they thought were interesting. So I applied to all the top medical schools, a couple in the middle, and a few at the bottom. [48]

Nevertheless, she attended a mediocre school. Another was given quite the opposite advice by a dean of a state medical school:

. . . he gave me the best advice anybody gave me because I had been thinking of applying to the second-rate schools. . . . He said you are really being foolish. Those schools are very conservative and they can't afford to take a chance on somebody like you. . . . You apply to twelve schools, and ten of them should be Ivy League, big-name schools. I thought he was completely crazy, but he was right. [11]

Despite the fact that older candidates did not express much concern about the quality of their education, they did in fact attend lower quality medical schools. As seen in Table 2, using the AMA data, those who began medical school at age twenty-seven or younger

were more likely than older matriculants to attend a high quality school, 52 percent compared with 39 percent.

Table 2

Quality of Medical School (United States)
by Age at Matriculation

	<u>Younger</u>	<u>Older</u>
	<u>%</u>	<u>%</u>
High ^a	52	39
Low	<u>48</u>	<u>61</u>
Total	100	100
(Number of persons)	(1589)	(695)

^aUsing the ranking scheme developed by Cole and Lipton (1977), based on reputation, we have created four categories of estimated quality. The ninety-four schools in existence at the time of the Cole and Lipton study were divided into quartiles, ranging from high to low. To simplify analysis here, they were dichotomized into high and low.

These findings may not be surprising when we consider the attitude of most medical schools toward older applicants. Older matriculants, because they are at a disadvantage, may resort to lower ranking schools. We have already seen that older matriculants are more likely to go to foreign schools. On the other hand, there is also reason to believe that the "better" schools are the ones that can afford to take a risk with such atypical students, as was suggested by one of the respondents earlier. Yet, our data do not confirm this notion.

The Medical School Experience

The years required to become a physician are long and demanding. The four years of medical school are typically divided into two major phases: the basic science or preclinical part (involving subjects

such as anatomy, biochemistry, pathology); and the clinical part (with studies in such areas as internal medicine, surgery, obstetrics, psychiatry). Depending on the chosen specialty, and whether board certification is desired, the physician may spend a number of additional years in training.

From the time older matriculants first begin to think about pursuing medicine they are constantly reminded by premedical advisors, teachers, member of medical school admissions committees, as well as family and friends, that they are "too old" to begin a new career; that they will be "middle-aged" by the time they complete their training. While we have no way of knowing how many potential older recruits are sufficiently discouraged to abandon the decision to pursue medicine, we do know that substantial numbers persist. When asked if their age had any bearing on the decision to pursue medicine, the answers were consistent--it did not. While obviously age was a factor that could not be denied, particularly in terms of the likelihood of getting accepted, it did not deter our respondents from at least trying. The general feeling was that they would be getting older whether or not they were in medical school, so they might as well be accomplishing their goal. The following anecdote typifies this feeling:

A friend said something to me one time. . . . I was feeling sorry for myself. I was working and going to school (premedical). I was complaining and I said, 'John, I am going to be thirty-four years old when I finish [medical school].' He said, '. . . you're going to be thirty-four anyway!' And that stuck with me. . . . I wanted to do something else, and how long it took didn't matter. [45]

One man, who would be even older when he finished, had a similar realization:

There was that 'I'll be thirty-eight when I finish!' You know,

close to middle age, forty! My God! And then something happened. I said, 'Why are you thinking as if you will stop living for eight years--four years in medical school and three years of residency. Those are living years. They are useful years, productive years, enjoyable years. Why see them as wasted years while you are in the process of becoming something?' [41]

For many, therefore, medical school was not seen merely as a means to an end. The process of becoming a physician was believed to begin with acceptance to medical school [emphasis mine]:

I wasn't impatient to get done. I thought that once I was accepted to medical school I was starting my career. . . . I'd be doing what I wanted to do. [44]

One respondent even began to feel like a physician "on the day that [he] entered medical school":

On [that] day . . . the process begins. People treat you differently and you treat yourself differently. You're in a special category of people and you start to identify with that rather quickly. [31]

The notion that time was not being wasted was important. Looking back, many felt the time they spent in other pursuits was, in fact, the time that was wasted. That they could now accomplish this goal made the long years ahead seem bearable, and for some, enjoyable. Most important was the feeling that they were doing what they wanted to be doing, as illustrated by the following remarks:

. . . I am not in this bidding my time, waiting to do what I really want to do. [7]

It seemed to me that as long as I was moving in a direct path toward what I wanted to do that there was no problem. [28]

For something that I wanted badly, it didn't seem like a long amount of time to have spent. [13]

The students who attended foreign medical schools could anticipate an even longer training period. Some foreign schools required six years of didactic and clinical training. In addition, some students

take longer because of academic problems due primarily to difficulty with the foreign language. In many foreign schools, students are permitted to repeat an examination in a given subject several times before they are finally dropped. Thus, it is not unusual for a student to take as many as eight to ten years to complete a six-year course. Nevertheless, these students expressed the same determination as their American-trained colleagues, regardless of the amount of time involved. One such student allowed himself ten years to complete his undergraduate education in Spain, although the school required only six. He managed to finish in seven years:

My feelings were that it was the only way possible for me to achieve my goal and I didn't care how long it took. . . . Come hell or high water, I was going to achieve this goal. [38]

After having earned a degree from a foreign school, students must then pass the Educational Committee for Foreign Medical Graduates (ECFMG) qualifying examination, which permits them to practice in the United States or to take an internship or residency in an American hospital. Some students have difficulty passing this exam, which adds more years to their training.

The process of becoming a physician is not only long; it is demanding. The impact of medical education on the student, in terms of both professional and personal adjustment, is an area which has received considerable attention in the literature.¹ Although older matriculants in our study were interviewed primarily on the decision to pursue medicine and the outcome of that decision, rather than on the medical school process, it was possible to discern something about the experience of being a medical student. In addition to the experiences which all students share, older students have those which are unique to

their situation. This section will explore some of the activities and concerns during medical training, both inside and outside of the school setting.

Academic Demands

Most of our respondents had completed their undergraduate college education well before entering medical school. Yet, in the years immediately prior to entering medical school, many had returned to college to complete the premedical requirements. Most often, they were employed in various sectors while doing this. Others had never been away from school, attending graduate programs on a full- or part-time basis. So, generally, the transition to the role of student (from one's former role as employee or housewife/mother) had taken place before medical school began. Thus recruits were excited rather than intimidated by the shift: "I felt excited about the academic part of it, and I looked forward to the time when the clinical years would start so you could really apply the two years of basic science." One woman anticipated that the four years would be "very interesting years" but recognized the demands, as well: ". . . you have to put a lot of effort into it. It's not easy, but nothing is." While most anticipated that medical school would require great effort, few were prepared for the total commitment necessary. This was particularly true for the first two years, which focused on the basic science courses. The amount of material to be mastered seemed overwhelming to even the most competent student. They were caught in the conflict described by Fox in the classic socialization study, The Student Physician (in Merton et al., 1957), referred to as "training for uncertainty." The

student must strike a balance between attempting to learn all the material that is presented and deciding which of it is important to learn. One way of dealing with the conflict was to focus attention on "passing the exams rather than accumulating all the knowledge." According to one respondent, "I never really believed that this basic science stuff was crucial to my being a good doctor."

Older matriculants were surprised not only with the amount of material that needed to be learned, but with the way in which it was to be learned. They deplored the emphasis on memorization and rote learning, which required "a high school mentality." One respondent expressed his disappointment:

My fantasy was that I would handle [the work] in a mature fashion . . . because I knew what I wanted to do. . . . The problem is, medical school is not a mature process. [41]

The infantilizing process is further described by another:

And one thing about medical school, it's not the same thing as [getting a Ph.D.]. It's not the same thing as writing a book. Once you get on that train, you've got immediate gratification in the sense of passing a test or immediate punishment in terms of failing a test. It is very juvenile in a lot of ways, a very authoritarian set-up in which rules are very clear. [28]

For this respondent, at least, such structure was "part of the appeal" of medicine; for most, it clearly was not.

Although demanding in the amount of material one must learn, medical school was not perceived as very difficult. In fact, one respondent feels there is a "myth" about the difficulty of medical school. Rather, it "really is a question of time." That is, if a student "puts in a certain number of hours," the material can be learned. "Most everybody has to look a lot of things up ten to fifteen times before they remember them."

Even with this perspective, many students had difficulty

adjusting to the academic demands. It was particularly problematic for those who had formerly been educated in other areas, notably the social sciences and humanities. One woman who felt she was capable of doing the basic sciences also felt that "her heart was never in it." She describes the world as being made up of basically two types of people--"scientific and humanities." She was "a humanities person--a language person." A former philosophy graduate student found difficulty adjusting to the "rigor of scientific courses" because of the ". . . emphasis on detail and memorization. Nobody wanted you to think about anything." One woman felt compelled to "go beyond memorization," she said. "There was a sense that I really wanted to understand everything along the way. But there simply was not time to do it." Even those who had been trained in the sciences had trouble adjusting to medical school because of the different orientation. One former Ph.D. chemistry student compared her graduate work with that in medical school:

. . . I found there was just no time for anything, as opposed to the liberty that you have in graduate school of sitting or going to the library and thinking about things. In medical school, there is no time to think. There just isn't. And I think that was the most difficult thing. [18]

Exam-taking posed particular problems for such students. One remarked: "We were light years away from multiple choice exams."

Another said:

We came from a Ph.D. program in which there were oral exams. It was a completely different mind-set. You don't just memorize things and spit them back to the people on exams. You have to think about things. You have to think about processes. It was such a different type of studying that it was shocking. It was incredible. [47]

Although respondents clearly expressed discomfort with the

nature of medical education, specifically in the first two years, the adjustment process was ameliorated by two factors. First, most medical schools graded on a pass-fail basis, thus eliminating or reducing competition for grades. Second, most students realized that they would never "flunk out." It is well documented that the attrition rate in medical schools is low, usually less than five percent for both academic and personal reasons, with academic factors being less responsible. Most schools encourage students to repeat a year rather than to withdraw. While it is also alleged that the attrition rate of older students is considerably higher, the older matriculants we interviewed were optimistic about graduating. This was based not so much on their own ability, but on the belief that medical schools were reluctant to lose their recruits:

Once I got there I realized the hardest thing was getting into medical school; to stay there was easy. [43]

Once you get into medical school, you have to work hard to get out. That the school, once committed to educating people, is going to educate them, period. [49]

On the other hand, some were less confident. One woman felt that all students have the "fantasy" that somehow the school made a mistake in accepting them. She had that fear her whole first year: "They picked 110 students out of 12,000 initial applicants and they made one error and that was me!" [Emphasis by respondent] One third-year student shares that fantasy:

. . . I always think it's a fluke. This year I am going to get found out. I just happened to pass the last course and I just happened to do well because the teachers were easy and the course was easy. And, I am really going to get found out. [45]

Another, who admits that she never really assumed she would graduate until she graduated, thinks the above attitude is not typical of most

students. She said, "I think most students assumed they would graduate from the beginning. And consequently, I don't think they worked as hard."

This woman's observation was not unsupported. Some students admittedly did not work as hard as they could have. In part, it may have been due to their complacency about graduating, though this would affect both younger and older matriculants alike. Older matriculants, however, seemed to have other factors operating as well. They were responding to their past experiences--as graduate students, professionals, workers, and to their current positions--as husbands, wives, mothers and fathers. Unlike the typical medical student who virtually has had no life outside of school, the older student has had a well-rounded life, with political, cultural, and intellectual interests. In talking with older matriculants one gets a sense that they have a pragmatic attitude toward medical school and medicine as a profession. It is a goal that they desperately wish to achieve; yet, they do not wish it to rule their lives:

One of the things I thought when I started [medical school] was if you look around at doctors, and especially male doctors, a lot of them are sort of crazed and I thought, well, they must be doing some of that to themselves. If I ever get to the point where my career is making me that crazy, I am just going to drop it. [11]

Although there was a desire to maintain a balance between one's personal and professional life, some respondents were unprepared for the difficulty involved in doing this:

I knew it was going to be a long haul. I don't think I realized just how grueling it was going to be. It really means you are forsaking pretty much some of the prime years of your life. . . . It doesn't really allow you to explore any of your other interests. You really have to be very uni-directed when you are studying medicine. You basically have got to study medicine. [17]

This man seems to portray the conflict that confronted many older students. One way of dealing with the problem was to give in to the demands of medical school. For some, medicine became a way of life: One woman became so immersed, she said: "I didn't know whether World War III had been declared." Another said: "My entire world revolved around being in school." Most others, however, refused to let this happen. Their way of dealing with the conflict between school and personal life was to set limits on the academic demands. They regulated the amount of time and energy devoted to studying so that they would have time for family and friends. The cost, however, was less than perfect performance in medical school. Older students demonstrated internal standards of acceptable performance, based on their own sense of what was important, not on what faculty or peers expected of them. Consequently, they did not feel the pressure to be among the top students in the class; they were content to be "average" or "in the middle" or "mediocre." Only a few said they did "very well" or "well above the middle." One or two were in jeopardy of failing. This is often in contrast to their performance in previous academic and professional pursuits where many were well above average. However, the decision to be average rather than brilliant was a conscious and deliberate one, due primarily to priorities placed on family obligations. One woman felt that she had responsibilities that other students didn't have, namely a husband and two children. She was "not willing to give up everything for medicine." Another, who described herself as "average," said: "I wasn't spectacular in any way. I just wanted to see my family." The decision to compromise is more poignantly stated in the following remark:

While I had always expected a lot of myself . . . I just had to take the position that I would be happy to graduate last in my class. It was very hard and it was something I had to remind myself of every day. [11]

The women with a husband and/or children were the most outspoken about compromising their academic performance, but even those without such commitments felt the need to have some semblance of a personal life. Generally, they believed that they could have performed better if they wanted to. One woman, with a Ph.D. in science, described herself as "mediocre":

I wasn't exceptional at all. And I think I was disappointed at not being better. I could have worked harder but I wasn't prepared to put in what I had to, even to do really well. [18]

A man with a Master's degree in engineering had similar feelings: "I did fairly well for the amount of time I put in," he said. "I knew I could have done better if I studied three times as hard." Another woman, with a Ph.D. in science, who always "wanted to be tops" settled for less because she didn't "wish to throw [her] life away completely." Similarly, others remarked:

I didn't work anywhere near with the compulsion that I have applied myself in other areas. (A woman with two Master's degrees) [10]

If I had changed my priorities I am sure I could have done better. (A woman with a Ph.D. in psychology) [7]

In part, adjusting to the academic demands of medical school was linked with students' attitudes toward the medical school curriculum. Most schools were based on the traditional curriculum--two years of basic sciences followed by two years of clinical rotations. Some of the students seemed to question the "relevance" of the first two years: "Here we are wanting to be doctors and they're throwing the tertiary structure of the protein at us. . . . What does this have to do with

treating somebody's cold?" Students were eager to see patients and "resented" having to do two more years of basic science after college. It was often difficult to see the connection between these years and their ultimate goal of "being a doctor":

You are really expected to learn so much. Day in and day out for two years. It's just straight book work and lab work and study all the time. It's very trying. And it's very different from what you're planning to do--being a doctor. [44]

The clinical years were a long-awaited change. For one student, it was "what [she] had really come for." It was the first time students were able to "make decisions" and to be involved in "patient management." And, finally, they began to recognize the significance of the first two years. They gained "a perspective on it," according to one student, which they lacked as first- and second-year students. In fact, one respondent wished she "had learned [the basic sciences] better" because she "comes across it all the time":

It seemed like the first couple of years was a whole lot of irrelevant stuff that we had to learn and that had no relation to the patient. But, it's not irrelevant. Every bit of that stuff comes up every day in medicine. [44]

The time spent memorizing "muscles and bones and nerves" in gross anatomy is finally worthwhile: "The stuff really does make sense. . . . Anatomy not only makes sense, but you start to see why you need to know certain things," said one surgery resident.

The discussion thus far has concentrated on those students who attended American medical schools since they account for the majority of our sample. However, those who attended foreign medical schools had problems similar to those of their American peers as well as problems unique to a foreign education. In addition to adjusting to the lifestyle in a different culture, foreign students had to master the

language. Even those who arrived with some familiarity with the language found it difficult to apply their skill to the voluminous scientific and technical material. The tendency was to rely on written texts rather than on class lectures. This was often simplified by obtaining comparable textbooks in English, or occasionally transcriptions of the class presentations. One student had his wife translate the material into English since her command of Spanish was better than his. Particularly problematic were exams since they were usually oral. Even when students could learn the written language, they had difficulty expressing themselves in the language of instruction. It has been suggested that academic problems during the first year in a foreign medical school account for the high attrition rate of American students, reaching more than twenty-five percent. Adjusting to the culture is secondary. One student describes the difficulties:

The medical material being on the degree of difficulty that it is, plus the volume of material, the fact that it is in a foreign language--this was a tremendous hardship, a tremendous hardship.
[38]

He describes the attitude of faculty as being very "unsympathetic." He mimics their attitude:

'You are in my country, damn it, and you are going to learn to speak Spanish the right way. You are not going to take the exam until you do.'

The typical medical student, unlike the older student, has followed a somewhat narrow path into medical school in terms of previous academic training (an emphasis on the basic sciences) and the time period (directly after college). According to Rogers (1978:113), regarding the typical medical student, premedical studies tend to make students ". . . very single-tracked, overly competitive, preoccupied

with how they are perceived by teachers rather than with what they are learning or becoming. They are more interested in the outcome than the process. They focus on grades, not course content." In fact, Boyle and Coombs (1974) found that the major cause of stress among first-year medical students was academic pressure. Our older matriculants do not seem to fit that pattern. They chose to deal with academic demands, not in the way described above, but by setting their own standards of performance, being less competitive, less concerned with grades, per se, and by placing emphasis on the process of becoming a physician.

Faculty-Student Relations

It was not unusual for our respondents to be older than many of their professors or to have similar graduate degrees. One might expect this situation to create a problem for students and faculty alike. As we learned from respondents in the previous section, medical school was often perceived to be "juvenile." If there is a tendency for faculty to treat students "like people in high school," as we were told, could faculty expect the same compliance from a thirty-five-year-old, with a Ph.D., as they could from a twenty-three-year-old, straight out of college? Would faculty, then, defer to the older student? On the other hand, would older students resent being treated as children by the faculty and refuse to comply with this treatment?

As it turns out, age seemed to have little or no bearing on the relations between faculty and students. The status of student generally took precedence over that of age. One older respondent remarked:

The clashes I had were the same clashes the younger students had. I didn't feel because of my age there was any difference. [15]

This was due, in part, to the anonymity of students, both young and old:

The first thing is that you don't really get to know the professors unless you choose to. All of the classes are en masse and the people who wanted to get to know the teachers, I think did it, but it was not a function of age. [27]

One student anticipated that she would get to know faculty better than she did. Once in medical school, however, she became aware that there was "definitely a hierarchy":

Students were students and faculty was faculty and the fact that I was five years older than a lot of faculty didn't make a difference. [44]

The students who were treated differently suggested it was because of the way in which they responded to faculty, rather than the reverse. One woman who worked in a college as a student counselor, prior to medical school, felt this helped her relationship with faculty:

I think to a large extent I'll get a different response from faculty because I respond to faculty differently. . . . It's a more personal thing. I've been on a colleague-peer level with faculty, so I am not apt to see them as 'teacher.' [30]

Another, who had done graduate work in science in a major university prior to medical school, also felt the experience affected her relationship with faculty:

For me, I was not in awe of these professors. . . . Why? Maybe because I felt more like they were colleagues. I had a Ph.D. Essentially they were gearing themselves toward a college crew. These were kids--twenty, twenty-one, twenty-two. And there I was, twenty-nine. . . . I had been at [a major] University with a lot of people that actually knew what they were doing. There were some tough researchers. And these people, to me, were like nothing. We used to have lunch with Nobel Prize winners. And so when these people were so arrogant and cocky, I would say, 'What is this? Who do they think they are?' So, in a sense, it was just a different type of relationship. [47]

Older students were not as likely to be intimidated by professors. In fact, some of the students talked about friendships which developed. One former city policeman who attended a foreign school felt that faculty responded favorably to him because of his "brash personality":

Having been a policeman in New York, you go someplace else and there just isn't anything that fazes you. . . . They were very demanding and very strict and some of them were younger than I was and they would say something and I would go right back at them and I'd say, 'Listen. I'm not a twenty-three-year-old kid that just got off the boat. I won't take it.' They were very shocked that nobody talked to them like that, and that's how I got to be friends with them. [2]

One woman who did get to know some faculty felt that she was "much more their peer, socially, than [she] was the peer of most of [her] fellow students." Another student felt the same way. Prior to medical school, she expected that the friends she made during school would be "lasting friends" and "would be more likely to come from faculty than from the student body." Her assumption was correct in that she describes her friends as two-thirds from faculty and one-third from classmates.

Overall, students who described their interaction with faculty expressed little or no recognition of it as being due to their age. Those who did relate to faculty more as peers than as students seemed to attribute the relationship to the way in which they responded to faculty based on how they perceived themselves, rather than to differences in faculty perception of them because of age.

Peer Relations

Relationships which develop among students should be viewed within the context of the medical school setting. One of the most outstanding features is the homogeneity of the student population, most notably in the areas of undergraduate major, undergraduate grade point average (GPA), socioeconomic status, race, sex,² and age. Those who are atypical because of age (that is, older than age twenty-seven at matriculation) tend to differ in these other dimensions as well. It

has been documented that interpersonal attraction is influenced by common background (Festinger and Thibaut, 1951; Gerard, 1953). Consequently, we may expect that older matriculants tend to remain separate from their younger classmates, either by their own choice or because they are made to feel unwelcome in the younger group. Prior to entering medical school, several older matriculants were concerned that they wouldn't have "anyone to relate to." One fourth-year student recalls that she entered medical school expecting that she "wouldn't be happy" because she would be "much older than everybody else. How could I relate to them? How could they relate to me?"

Medical schools typically do not accept older candidates, so these concerns were not unrealistic. Based on admissions data, one might expect to find five late starters in a class of one hundred. Respondents, it seems, didn't expect to find that many; yet, they were pleasantly surprised. A few of them estimated that between 25 and 40 percent of their classes were older than average; others were content to find one or two. And, they were more surprised to find that "across the board" age made very little difference. The fact that they were sharing "common interests or common goals" obliterated any other background factor. It sometimes took as long as a year for this to be recognized. One woman, who had a difficult time adjusting to the academic demands of the first year, felt that "it would have been easier" if she had joined a group, but she didn't realize it until her second year. Her age prevented her from seeking out other students:

Well, most of the time I usually studied by myself. It would have been easier to have studied with a group but I always seemed to be so much older than everybody else. I wasn't really--maybe six years--but it just seemed I had lived so much longer. . . . [5]

One fourth-year student recalls that she, too, "tried to keep aloof" because of her "maturity" until she realized that ". . . no matter what your background is, there is nothing that prepares you for this. . . . It really breaks down the barriers between people." Another, who felt that she "would be set off from the group" because she too was "more mature" had a similar realization: "[Medical school is] such an overwhelming experience that things that have happened before aren't that important. We're all in this together."

The very structure of medical school tends to foster this sense of camaraderie. During the first two years in particular, students spend nearly all their time together in lectures and labs. They are virtually isolated from the world outside, devoting most of their time to academic pursuits. Thus, working relationships and friendships are often formed as a result of proximity rather than individual choice. Students are often divided into groups alphabetically, so that one befriends those with last names that have the same first letter. According to one respondent, "most close associations and friendships develop over the cadaver and the anatomy lab" because it is "such an intense, incredible experience. . . ." Later on, in the clinical years, relationships are formed "among those who were in the same block" or who "did rotations together." Thus, age had little to do with peer relations in the academic setting. Occasionally, study groups were formed by older students, but this was more for emotional support than anything else. Older women with children felt especially burdened by the academic demands.

What did tend to separate younger and older students was not age, per se, but lifestyle. As one respondent put it, "If there was a

peer difference, it was socially more than professionally." More older than younger students entered medical school married, with children, and nearly all lived off campus.³ They had neither the time nor the inclination to "hang out in local bars" or to "chase nurses." Once medical school was over for the day, they went into ". . . a totally different life," a "separate life."

Our respondents rarely became involved in medical school activities of a social or political nature except for "getting together with friends." They simply lacked the time. Some had never been "political" or "involved with organizations"; others were forced to become "apolitical" because of time constraints. One foreign medical graduate felt that being in a foreign school was a particular disadvantage:

I had gotten caught up in sort of a survival for being a medical student. . . . And I felt bad about that because I felt if I had been a student from the beginning in an American school, I probably would have developed a way to also be an activist in my class. [51]

While the lack of time for such pursuits may not be unique to older students, it is evident that many have responsibilities, other than academic, that younger students do not share. So while all students are overwhelmed by the amount of time required for studying, older students may find their time even more limited. Nonetheless, some did manage to find time to become involved in school activities, usually after the first year. Some felt that they had a particular expertise, based either on their age or previous experience. One respondent felt that his presence on the admissions committee was precisely because he was older, since he would "make the faculty somewhat more comfortable by not having a young person on the committee." He felt he was important because his "judgement as to who would make a good doctor was better than anyone else's." Another respondent felt especially

qualified to be on the student senate because of her previous experience as a faculty member in the medical school she now attended. She was "well acquainted with the faculty and administration" and they took what she had to say "seriously," "maybe more seriously than they would have from just a student." However, she had to make it clear that "she was a student functioning as a student for students." Some other activities involved various student associations, either on a local or national level. One respondent was the first woman president of the American Medical Student Association.

Overall, older students had no trouble relating to younger students. In fact, one thirty-four-year-old woman found such students "enjoyable." She admired their "openness" despite the fact that they were "very young and inexperienced." Another mentioned that, "Oddly enough, some of my best friends were younger people who had gone through the traditional premedical schedule." Apparently the feeling was mutual. One matriculant felt that older students "were looked up to and admired." One, in fact, was sought out by younger classmates so they could "learn to deal with violent people" or "with paranoids." The ability to deal with "all different types of personalities" according to this respondent comes from having "perspective" which comes with "experience."

Financing Medical Education

The cost of educating a physician has increased sharply in the last two to three decades. Federal funds for medical schools have not been able to keep pace with these rising costs. Consequently, schools have been forced to pass the burden on to the student in the form of

increased tuition. In addition to meeting the costs of tuition, room and board, books and supplies, during the four years of medical school, students are forgoing income.⁴ However, among our respondents, the decision to go to medical school and the choice of a school were not usually contingent on such economic considerations. The overriding goal of most older candidates was to get accepted to a school. "Money was not germane." It is not that such considerations were ignored; they were secondary. One respondent who was prevented from attending medical school when he was younger because his family could not afford it decided that money "was not going to be a deterrent if I got into medical school. Somehow I was going to figure something out." So, concern about finances was often postponed until acceptance was certain. The excitement of the acceptance notice was dampened for one individual when his uncle asked, "How are you going to afford it?"

. . . at that point the reality of the situation hit me. I had no means and no money. So I really didn't know what I was going to do. Then, all of a sudden, the acceptance didn't mean much. [39]

Unlike the typical medical student, most older students have been financially independent for many years. Prior to their decision to pursue medicine, they were employed in well-paying fields, including teaching on the secondary school and college level, nursing, social work, research, etc. The first change in financial status often occurred when a definite decision to study medicine was reached. At that time, many had to return to college to complete the premedical requirements. Since time was a factor, they often gave up their jobs to attend school full-time. Consequently, their income was substantially reduced or eliminated. One woman, who had been a school administrator prior to medical school, described her plight as she returned to school for

premedical studies: "I sold everything. I sold my car, my bicycle, my skis . . . and I borrowed. . . ." So, by the time they are ready for medical school, their resources have often been depleted.

Being poor and in debt was a very difficult adjustment for older matriculants. One former psychologist, with a faculty appointment at a major university prior to medical school, was "bothered" by this:

. . . I have never before in my life been in debt. And to have gone all the way through, not being in debt, and then at this point in my life, this late in my life, having debts! It bothered me. [7]

A former nurse, who also had never been in debt before, said, "It's a funny feeling. . . ." She had worked, even as a "kid," and put herself through college and nursing school. The problem for all medical students is that employment, full- or part-time, is virtually impossible given the demands of the medical curriculum. A few respondents were able to work, usually during summers and vacations. One said he "worked like a bandit" in a "day camp during the day . . . a pharmacy at night and [in] the mountains to bus and wait tables every weekend." Rarely did students work during the academic year.

Therefore, various sources and combinations of loans, scholarships, and financial aid are the primary means of support. It is interesting that respondents make an implicit distinction, though significant, between money which is obtained from bank loans, savings, scholarships, etc. and that which is obtained from family and friends. Those who rely on the former feel that they "did it on [their] own." One woman who realized that the "financial part seemed difficult" said she "wanted to do it [herself]" so that her parents would be able to

help out her younger brother and sister. Not all, however, could be that self-sufficient. Most difficult of all was to accept money from parents, regardless of whether it was a gift or loan, requested or offered. At least two factors contribute to this. First, older matriculants tend to come largely from working class backgrounds, so parents were not always financially capable of providing support. Some parents were retired or near retirement; some had younger children to support. Second, older matriculants had been financially independent of their parents for many years, and were reluctant to return to a state of dependency. One physician, who did not take money from his parents, remarked:

Financially it was very difficult. It was very difficult to borrow money from my parents. I mean I had been independent for a long time. I had been working since I was seventeen. I always had a job and I hadn't taken money from them in fifteen years. It was a little hard to backtrack and say, 'Look folks, I really need you to help me out.' [27]

One woman with two children "felt terribly guilty" taking money from her parents after her husband left and refused to support her, even though they were eager to help. This is in sharp contrast to parents' attitudes and behavior regarding the undergraduate education of their children, as we have seen. Now, parents were generally willing to "do as much as they possibly could." Rarely were they reluctant to provide support. Those few who were, refused to help during the premedical stage, when they thought medical school was nothing more than "a whim." One father thought his daughter was an "adult," and "adults shouldn't ask parents for money." However, he eventually "came around."

Those who were married were more willing to accept money from a spouse than a parent, although it was not always enough. Some who

intended to rely on such support were left without money because of a divorce during the four years of school. This was not uncommon.

Money from institutional sources rather than personal sources was more acceptable, and more dependable. Few respondents mentioned the exact amount of indebtedness, but they were in "tremendous debt," "deeply in debt." Estimates ranged from \$25,000, which was "much less than most," to more than \$65,000. One respondent deliberately "borrowed to the hilt" so he "could live as well as possible during those years of medical school." There was little or no concern among students regarding their ability to repay such loans. Rather, it was the idea of being in debt that was disturbing.

In addition to bank loans, some students relied on scholarships and financial aid. One source was the Public Health Service, which allowed students tuition, money for books and supplies, and a living stipend in exchange for a commitment to work in a physician shortage area after medical school. Usually students were expected to serve one year for every year of financial support. The Air Force had a similar arrangement, whereby students enlisted in the service after school. Some students found it easier to think about "paying back" money than "giving back" years of their lives.

Marriage

The status of being a medical student largely determines one's social identity.⁵ It is clear from much of the preceding discussion that being a student occupies most of the individual's time and energy. Medical school is an experience which "is lived and breathed twenty-four hours a day." Respondents were concerned about how they would be affected by this as "a human being" or "as a real person."

I was surprised at the human capacity to suffer and accept it, and I was working one hundred hours a week, tired but I was able to keep on doing it. . . . I was mostly angry at the impact it had on my social life, and the fact that there was just no time to hang out, have fun, and do all those things that human beings were supposed to be doing. [25]

One talked about "putting some part of himself aside"; another about a mourning period for the parts of herself that were going to get submerged" by medical school. One way students coped with the academic demands, as we learned, was to set limits on the amount of time devoted to studying and to medical school activities, thus leaving more time for family and friends. This was not an easy task, however:

It's hard to balance. You really can't balance. It's got to be a complete break and you have to explain to people, essentially, 'I'll see you in four years!' [49]

"Personal relations go right down the tubes," according to another respondent. One man said that at the time he wanted medicine so much that "he would get it regardless of what it did to [his] personal life." While this last remark reflects an extreme position, it serves to remind us of the constant struggle among medical students to balance their personal and professional lives. Clearly, the lack of time, energy, and money prevented students from engaging in social activities as they had before; yet the desire remained:

I no longer could have a significant social life. My friends now became really the people in the class and the many people I had known outside of the classroom were relegated to once every few months. . . . Outside activities disappeared as did going to the movies and concerts and political activities. [25]

It has been suggested that the notion of "delayed gratification" makes the acceptance of hardships easier because it is viewed as a temporary state. That is, perhaps medical students live in anticipation of future rewards, such as financial security, prestige within the community,

independence, etc. (Perlow and Mullins, 1976). For at least one respondent, this was true. As a former model and actress, she felt she "had it before" and would "have it again." Nevertheless, she too became "frustrated" by the restrictions imposed by being a medical student. More often, older matriculants felt that, compared with their younger classmates, they were "more acutely aware of what [they] were giving up." After all, they had spent much of their adult lives in other than academic pursuits, with time for friends, family, theater, concerts, etc. What one respondent missed most were "just . . . everyday little normal things that you don't get to do for a very long time," like cooking and spending time with family and friends. She feels that people "who went right through college and medical school and residency have never had a life like that so they don't miss it as much."

Probably the most significant relationship to be affected by medical school is that between husband and wife.⁶ This has less bearing on the younger medical students who are not likely to be married upon beginning school. However, more than two-fifths of older matriculants that we interviewed were married. In fact, most had been married at the time of matriculation to medical school for some time, typically since college days. Nearly all had more than one child. Consequently, the adjustment and changes that accompanied returning to school affected the student's spouse and children as well. Students had less time for family obligations, including child care, household chores, emotional support, and affection. Role conflict was common; that is, the expectations and obligations of being a student clashed with those of being a husband or wife or parent. This was, perhaps, most severe in marriages of a long duration in which behavior had been habitual and predictable.

And it was especially problematic for couples in which the wife returned to school. Only a few of our married female respondents had worked for pay outside the home prior to medical school. They had young children, and their primary responsibility was the home and child care. Thus, their ability to change roles smoothly largely depended on the support of their husbands. But the husbands varied in the amount of emotional and physical support given. Some gave verbal approval, but did not, in reality, accept the situation. One woman with three children said her husband's role changed "dramatically," and although he "took his share of household responsibilities" he "hated it." Another woman with two preschool-age children said her adjustment to medical school was "gruesome." Although her husband was initially adverse to her pursuing medicine, he was "quite committed to it" by the time she gained acceptance. However, his ambivalence became increasingly evident. He "took the children and did things with the children," but "there was always some pressure from him that I was neglecting them as a family. . . ." She stated emphatically, "I felt guilty about that."

Another, with two young children, expressed similar problems. Her husband never thought she would "get as far as making the applications." However, when she seriously decided to pursue medicine, "he talked about how he would help out." They decided to divide the household chores; however, she was so tired most of the time she occasionally failed to do her share. Her husband complained that she had no time for her children or home: "I can remember . . . one night he woke me up in the middle of the night by throwing pillows at me and dumping all the laundry in the bed." Management of the home responsibilities was

not the only source of tension between partners. Lack of time spent with one's spouse was a critical factor. One woman felt that medical school had put a "strain" on her relationship with her husband:

. . . I was really tired a lot of the time and not feeling like I could engage in an emotional part of my life. . . . I think it made me much less available to have a relationship with him. [33]

For another, the effect of medical school was more serious--it "destroyed" her marriage of ten years. The problem was not so much her unavailability for care of the home because her husband was "very good about that." Rather, it was that she was "truly unavailable" for him and "he was lonely."

But, more than anything else, one gets a sense that it was the emerging independence of these women that created the greatest strain. There were feelings of "jealousy" or "competition" on the part of some husbands, although this was not always explicitly stated. For example, one woman said her husband was "bothered" when she did well. He would constantly say such things to her as, "You can't do that. You can't study physics. What do you know about physics?" So "immobilized" was she by this that she eventually failed an exam for the first time in her life. Another husband feared that his wife, upon returning to school, would "leave him and marry a rich surgeon."

These were men who, for the most part, were accustomed to their wives being homemakers. All of a sudden, they were confronted by women who not only leave the home in search of a career, but who have chosen perhaps one of the most demanding and prestigious occupations. While most of the men were, themselves, in highly respected positions, only one was a physician. He married his wife after she decided to pursue medicine, yet he, too, was unprepared for the effect it would have on

their relationship. His wife explains:

. . . Although he's a rather liberal kind of person and he wanted to be married to someone who was intelligent and a leader, he was raised in a generation where men were male chauvinist pigs and women were housewives. [33]

For example:

When he's working late, I try to be very understanding and of course he is very appreciative. But when I am working late, he is very annoyed.

So, even the men who were somewhat comfortable with the idea of their wives having careers had some difficulty with the idea of being married to a medical student.

The strain created by the need to reassess roles and priorities in the marital relationship took its toll. Approximately one-third of those who were married at the outset of medical school were divorced before graduation, with most separations occurring during the first year.⁷ Male and female students were not equally affected, however. The marriages with the wife as a medical student were clearly at higher risk. While equal proportions of males and females entered medical school married, the rate of divorce was dramatically higher for females. More than one-half of the women were divorced prior to graduation compared with one-tenth of the males. This is not surprising in view of the role of women in contemporary society. Despite recent advances, including the influx of women into the labor market and in higher education (notably medicine), women, more so than men, must deal with the conflict between the home and work. Women, by and large, are still expected to be the primary homemaker regardless of their educational and occupational commitments. The men, for the most part, could not accept the changing role of their wives. And the women could not

handle the demands of medical school while being constantly undermined by their husbands. For some, the tension began well before the decision to pursue medicine. For most of her ten-year marriage, one woman battled her husband's demands that she be "a real wife" with her desire "to be my own person." Until beginning medical school, she was thwarted in every attempt to declare her independence. Another, who had a Ph.D. in science, was aware of a sense of competition between her scientist-husband and herself. She states: "I wanted something of my own that I was going to be very good at." With medicine, these women could finally achieve a sense of independence. And it was this anticipated independence that enabled them to either initiate divorce or to accept it without being devastated. One respondent recalled that all her previous hesitancy about leaving her husband "dissolved" during her first semester in medical school:

. . . for the first time I was in a position where I soon would be able to support myself and I was in contact with other adults in a way you just aren't with babies. . . . Out in the world I could do anything I wanted. [1]

Yet the task of being in medical school, with no husband, and with primary responsibility for support (financial and emotional) of young children, was frightening: "I was never sure I was going to make it . . . to manage course work and kids too. People were telling me I couldn't do it," said one woman.

Yet, despite all odds, these women did make it. Although "[it] was an enormous strain on everybody," according to one divorced mother of two.

In contrast to the female medical students who were likely to become divorced, the males tended "to stick it out," despite clear

evidence of marital discord. There was the feeling that the wives were in some way dependent upon their husbands, at least from the point of view of the men. One physician explains that he is married, "At the moment--at the moment!" suggesting the possibility of an eventual divorce. His marriage has held together simply "because [he] couldn't get out of it"--he couldn't support his wife and their two children as well as himself. Another man explained that the ". . . big factor" keeping his wife and him together is that he "feels responsible for her."

Single people are also likely to be affected by medical school in terms of their inclination toward marriage and a family. Nearly one-third of our sample, all women, had never been married (or, in a few cases, were divorced prior to beginning medical school). Their attitudes vary. Some clearly never expect to marry: "I don't intend to [marry]. I've kind of stopped thinking about it, I guess in my late twenties," said one woman. Another, "I always assumed I would not marry." Others see marriage as a possibility, though do not dwell on it: "I still don't even think about it. That is so abstract to me. The only way I can think about it was if there was a person I wanted to marry."

For some, there is the recognition that medical school, or the decision to pursue it, in some affected plans for marriage and a family. However, ". . . it was a choice. Medical school in a way delayed [marriage]. But now that my career plans are clearer, I can think about getting married." Part of the dilemma surrounding the decision to marry or not to marry is the effect it will have on one's medical career. This is particularly true for women who want children,

as reflected in the following remarks:

I don't want to pay someone to take care of my child. I could do it better. But I don't want to give up working and I don't want to give up child care. [10]

I think that is part of my quandary. There is a piece of me that says that I could mother as well as anyone and how would I deal with the fact that someone else is going to mother my child and yet knowing that I couldn't tolerate being home twenty-four hours a day. [7]

At least one woman is confident that she would take time off from her career to have children. "I don't feel like I have to defend all of womanhood!" There are some women who feel they might want children, yet are not sure they intend to marry. For virtually all, however, the decision to have children with or without marriage is one which must soon be confronted. They are all in their mid- to late thirties, when childbearing becomes riskier for both mother and child. Several expressed concern over this issue. One second-year medical student recognized that it will be ". . . years before I'm free enough to have a family. I feel it is sort of a race. I'm thirty-one and there aren't that many reproductive years that I have left. And so that's a concern to me." One respondent postponed marriage during her medical school years until the first year of her residency, and even that, she felt, was too soon. However, her decision to marry came after "the decision to have a child," and "that simply biologically could not be postponed any longer."

Overall, most respondents expressed some difficulty in adjusting to one or more aspects of medical school. Some of the problems we touched on were academic demands, interpersonal relationships, and finances. Undoubtedly, one affects the other. For example, the amount of time a student is forced to study has a bearing on his relationship

with family and friends, as do the financial constraints imposed by medical school. There simply is less time, money and energy available for other than academic pursuits. In turn, tensions created by such changes in lifestyle may affect one's ability to concentrate on academic requirements. The process of adjusting to medical school is complex, often involving all aspects of one's life. And, for the older student, there are special problems, as we have seen.

It is surprising, given these hardships, that most respondents were satisfied with their experience in medical school generally, and with their chosen school in particular. Throughout medical school, most persevered without ever thinking of quitting; or, at best, had only fleeting fantasies of quitting. Even those who seriously thought of dropping out--usually during the first year--never lost sight of their goal:

What made me go on? I wanted medicine!

The four years of medical school, though, are only the first phase in the formal educational process. The remainder of this chapter will outline the remaining steps--postgraduate education and board certification.

Graduate Medical Education

According to a policy statement by the Liaison Committee on Medical Education, the Association of American Medical Colleges, and the American Medical Association: "Undergraduate medical education prepares the student for further education in a graduate program and not for the independent practice of medicine" (as cited in Levit et al, 1974). Graduate medical education has become "'a formal necessity for medical students'" (Lowenstein, 1979:95).⁸ In most cases, graduates

of medical school must complete at least one year of training in an approved hospital in order to be licensed as a physician. This year of training (traditionally known as the internship) is designed to expose the intern to a variety of general physical tasks in the hospital setting (Wolinsky, 1980). For the first time, the medical student is legally permitted to practice medicine, although only under the supervision of licensed physicians.

Until 1975, a graduate had the option of two types of internship programs: a straight internship, providing training on a single service--such as medicine, surgery, pediatrics, obstetrics-gynecology, or pathology--or a rotating internship, providing training for twelve to twenty-four months on two or more clinical services. (Not less than four of the twelve months were to be spent in internal medicine; the rest of the time could be divided between surgery, pediatrics, obstetrics-gynecology, or another specific service.) In June, 1975, however, an important change in graduate medical education occurred in which the straight and rotating internships were integrated in residency programs.⁹ Straight internships were redesignated "categorical programs" and were offered in medicine, surgery, or obstetrics-gynecology. "Flexible programs" replaced the rotating internship and provided a more diversified experience, including four months of internal medicine, with the rest specifically related to the approved residency program (Macy Foundation Study Group, 1980).

At the completion of the categorical or flexible year (formerly the straight or rotating internship), a physician would be eligible for full licensure for the independent practice of medicine, thus limiting himself to the general practice of medicine. Typically,

however, physicians elect to do more than one year of postgraduate training.¹⁰ Depending on the specialty chosen, a physician may do a flexible year and subsequently concentrate in the designated specialty, or may begin training with a categorical year. The years following the first year of postgraduate training have been referred to as an apprenticeship (Wolinsky, 1980; Stevens, 1971). More specifically, it has as its major goal the training of physicians for certification in a specialty by the approved specialty board (see following section on specialty boards).

At the present time, the majority of medical graduates opt for specialty practice. According to a study by the Board of Medical Examiners, following a sample of 1960 and 1964 graduates of United States schools, 89 percent entered residency training programs in a specialty; over 70 percent completed their training and were either board certified or made plans to become certified. Now that family practice has been approved as a specialty, it has been concluded that "almost all graduates from United States schools in the 1970s will receive residency training and board certification" (Wechsler, 1976:14).

At the present time, there are approximately 5,000 accredited residency programs in the United States, comprising more than 70,000 residency positions in the various specialty areas (AMA, 1980). Virtually all training takes place in a hospital setting, with such hospitals referred to as "teaching hospitals." (Hospitals are defined as non-teaching if they do not engage in the education of medical practitioners or students.) To qualify as a teaching hospital, a hospital must comply with criteria established by the Liaison Committee on Graduate Medical Education, which are stated in the Directory of Residency

Training Programs (AMA, 1980). Teaching hospitals may be affiliated with a university or medical school, although it is not a requirement that a residency program have such affiliation.¹¹ It is believed that the most desirable and competitive training programs are in affiliated hospitals (Krause, 1971). They are "more highly prized" because of their emphasis on careers in teaching and research (Marshall, 1978). Approximately two-fifths of accredited residency programs are affiliated in terms of financial and/or academic support. They are responsible for training 48 percent of the residents in the United States (AMA, 1980).

Training programs, like medical schools, may be ranked in terms of their overall quality. There is general consensus in the academic community as to the top twenty-five programs (personal communication with George Reader, M.D.). It has been suggested that four-fifths of the top American medical students from the top American medical schools attend the top training programs (Lowenstein, 1979). Among our AMA respondents, just about three percent have attended one of the top twenty-five programs, and there appears to be virtually no difference when age at matriculation is taken into account.

One more distinction in type of hospital should be noted, that is, between private (community hospitals) and non-private (public hospitals). As with teaching versus non-teaching hospitals, these may also have implications for the nature of training received and one's subsequent career. Non-private hospitals differ from private hospitals in their orientation; the former are likely to emphasize specialization and research and teaching while the latter emphasize private practice and service to the community (Lowenstein, 1979).

Residents in both environments assume responsibility for the routine management and medical care of patients. In the community hospital, however, they are more likely to plan and initiate the treatment as well. (See Mumford, 1970, for a comparative study of residents in university and community hospitals.)

Residency Training

Time of Decision

"One of the major recent trends in graduate medical education is the need for early decisions about specialization," according to Lowenstein (1979:99). Some academic residency programs, such as ophthalmology, may select their residents from among third and fourth year medical students--that is, up to two years before entry into the program. This is problematic in that medical students, particularly during their first two years, have limited understanding of the nature of medical work and the possible choices available to them. Consequently, they must often select a specialty before they have had any experience in that area. According to Anderson (1975), specialty shifting during medical school years is greater than might be expected. In a study of one major medical school, he found that nearly three-fourths of students make career changes between their freshman and senior years. The fact is that it is only during the third and fourth years (in most medical schools) that students do clerkships in each of the specialty areas.

While most physicians are likely to have made their career choices during medical school, there are some who decide even before they enter medical school; others drift through one or more years of

postgraduate training before making a commitment (Mechanic, 1978). Those who have some doubt after graduation may do a "flexible" internship.

The older matriculants we interviewed, for the most part, made their specialty decisions during medical school. Only a few switched areas after one or more years of training. But a substantial proportion, at least one-fourth, made a definite decision prior to entering medical school.

Those who chose internal medicine were more likely than the others to have made an early commitment. One respondent decided during his premedical studies that he wanted to do internal medicine "rather than anything else." Another colleague had a similar experience: "From the day I decided to go to medical school, I was convinced that I was going into internal medicine. I don't know why that was, but I never thought about anything else." Perhaps it has to do with one's image of being a doctor: "I always assumed that I was going into internal medicine. That's what it was to be a doctor. That was my definition of doctor." Often it is their previous academic or work experience which enables older matriculants to make an early commitment to any area of medicine. Unlike their younger peers, they have had an opportunity to work in the area they have chosen or in a closely related field. For instance, one respondent who "was very sure at an early stage" what he wanted to do said he "had always been interested in doing surgery" as a result of his experience as an orderly in a hospital prior to medical school:

The OR was a real area of suspense for me. I thought that it was the most intriguing place in the hospital where all important things happen. So, I knew I wanted surgery. [35]

It was later, during medical school, that he crystallized his plans to do plastic surgery.

Among our respondents were several nurses who had, perhaps, the best opportunity to experience different areas of medicine. One woman, while a nurse, was switched to the Department of Neurology where she found herself "Assistant Head Nurse." To her surprise, she found the service "interesting and challenging" and ultimately chose neurology as her specialty. Another neurology resident had done graduate work in "visual neurophysiology" prior to medical school. Even as early as the seventh grade she "was fascinated by the brain." So neurology "seemed to fit pretty well, particularly in terms of [her] intellectual interests."

Some physicians chose a specialty that would enable them to make use of their former skills. For example, an engineer chose imaging in radiology because of his interest in "instrumentation associated with surgery."

Some just had a gut feeling about certain areas. One pediatric resident "knew from the beginning" that he wanted pediatrics. This had less to do with his previous experience than with his "fondness for kids." He did, in fact, work as a counselor with children while deciding what career plans to make after college. With reference to pediatrics, he remarked: "It was just natural that it was going to happen; I never really had to search."

Some others, however, were not as confident about their career plans before medical school: "I wanted to clarify some of my career choices in medical school."

With so many possibilities available, it was often not easy to

make such a commitment: "I didn't want to make a decision about what I wanted to do until I had clinical experience because it was a real mistake to make a choice before that. It was a real hard time for me." Those who had no idea prior to medical school went through a "process of elimination" as they went through their clerkships in the third and fourth years. But even before that time, students feel a pressure to choose:

Unfortunately, they ram it down your throat by the end of the second year. Everybody's running off declaring themselves. As a sensitized observer, when people tell me they want to be internists in the second year, I laughed at them. But nonetheless, the pressure is long since there. [34]

Sometimes respondents were urged by faculty to choose an area:

One thing that does happen when you do your clinical rotations is you can always tell whether they like you because if they are happy with what you are doing, they say, 'You are planning to go into this, aren't you?' [1]

Choice of Residency Program

As with the choice of a medical school, geographic location was a primary consideration in the choice of a residency program. Virtually all interview respondents were in training (or completed training) in the New York City metropolitan area. This was, with little exception, the preferred location, even among those who attended medical school out of state. All physicians desired and attained positions in a university-affiliated hospital. A few completed the internship year in a community hospital and transferred to a public hospital for additional specialty training. Some programs were affiliated with both public and community hospitals, so that residents rotated between them. Even though respondents were limited in their options by geographic area, they had some preferences for particular hospitals within the

metropolitan area. More specifically, those who expressed a preference indicated "inner-city hospitals" or "non-private hospitals." There were two main reasons for this: the nature of the work and the type of patient population. Such hospitals were believed to be "exciting" and "challenging." One internal medicine resident was told that she would be doing " . . . things you never dreamed you would have to do or thought you would ever do." The opportunities for learning "about disease" were thought to be superior because "you are going to see everything." According to another resident, "One year in the city hospital system is equal to three years in the voluntary system in terms of knowledge" because "the patients are your own."

Residents also felt a "commitment to working with poor people" or "with Blacks." Physicians recognized that such programs would be more demanding than those in private, community hospitals:

I did not want to go to [a private hospital], which is for more wealthy people. You have a much easier time. I could have had an easier time of internship--but no, I had to go where the people needed me. So there's a little bit of masochism there, too. And, at the same time, it really is true that these people are the ones that need the help and not the people in the affluent areas. They have enough doctors there. [47]

A number of people are here because it's the only place they got in. But I think a lot of people feel the way I do. . . . I was told that it would be one of the hardest programs in the country as far as just physically working hard--long hours--just working really hard doing all sorts of things. . . ." [44]

Being a Resident

Residency training is, in many ways, an apprenticeship. In fact, students often focus on this phase of their training "for the development of their professional identity" (Lowenstein, 1979: 95). Respondents agree that they "begin to feel like a real doctor for the first time." For some, the feeling occurs "with

graduation"; for some, it is "the first day on the wards as an intern"; for others, it is "a general process" that extends through some or all of the internship year. It is at this time, more than any other thus far, that physicians feel a sense of "responsibility," of having others "depend" on them. In medical school, there was always "someone looking over your shoulder":

In our school . . . medical students did not take responsibility . . . which I went along with because I didn't feel I wanted to take responsibility until I knew enough about what to do. And, I set as a goal for myself graduation to know enough to be able to take responsibility in any kind of situation. So, at the point I started my internship, I considered myself responsible and capable of taking responsibility. [33]

The terms "responsible" or "responsibility" were repeated over and over again as residents described the transition from medical school to post-graduate training. One woman described the transition which occurs in a rather dramatic way:

I was sort of like a boy who goes to war and comes back a man. . . . I lost a lot of unnecessary shyness and awkwardness. I just had to go right in there and do it! [9]

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The analogy of "going to war" is an appropriate one. Residents typically work eighty to one hundred hours a week, often in thirty-six-hour shifts, as illustrated by a surgery resident: "Last weekend, I was on from Saturday 8:00 AM through Saturday and Sunday and all day Monday through 6:00 PM before I went home." Often, particularly in public hospitals, there is inadequate staffing, lack of necessary equipment and supplies, and too many patients to facilitate. One resident in psychiatry, who described her experience as "horrendous," explains: "Everybody's asking for intravenous, for soap, for urinals, and one nurse and myself at night--no machines, no supplies--just horror! A horror!" As a result of such circumstances, residents are often forced

to assume non-medical responsibilities: ". . . You find yourself being a messenger a lot of the time or transporting patients or doing a lot of other things so that you don't even have time to do your own work." Emergency rooms are used by patients in lieu of a family physician, so that they are crowded with the chronically ill in addition to those with acute trauma resulting from injury or illness, thus adding to the problem. Indeed, residents feel as if they are in a battle zone. They admit they are "so tired that they cannot think well." This "exhaustion" occasionally turns into "anger" or "hate" for the patients:

You find that most [residents] act as if they resent people for daring to be sick, particularly because the kinds of illnesses that come into an internal medicine service are in part the problem of chronic abuse. No one resents someone who has an infection that hit them out of the blue, but your average patient is there because he hasn't taken care of himself. [28]

Reminiscent of medical school days, but to an even greater extent, residents feel that their training affects them twenty-four hours a day. According to one, "It eats up your own life." Surgery residents feel particularly stressed: "It devastates your whole life." Another feels that "it marked [her] for life." One woman described the plight of her colleagues:

They are completely exhausted. Their marriages break. I have seen this happen. You come home and you don't want to see anybody. You are exhausted. You don't go to plays. You don't read. You become a completely medical person and nothing else. The rest of you is nothing. I didn't read the newspaper. I didn't know what was going on. Politically, it's just what I got through osmosis. [47]

Although fortunately, such experiences don't last the duration of the residency, they are "very common." "Everyone has a period like that." "Even when I wasn't on call, I couldn't get out of here," explains one resident. "There was so much to do." In addition to the work that must get done, there is a strong feeling of responsibility for the

patients, which keeps residents in the hospital even when they are "technically off duty."

Taking care of people is a very involved thing and if you are taking care of somebody and they get sick and it's normally your night off, you wind up staying there half the time anyway. [11]

To do otherwise leads to "chronic guilt."

Adding to the burden is the reluctance of residents to delegate responsibility to their colleagues:

If you are a chief resident and your intern calls you up in the middle of the night and says--more usually you have to call him --and he says, 'Oh, she is fine.' He wants her to be fine. He wants her to be fine so he doesn't have to do any work on her. I'm not the kind of person who is very reassured when an intern I don't trust says everything is perfect. So I usually go in myself. [11]

What is missing, therefore, "is the sense of trusting other people to carry out the work. . . ."

The combination of having a lot of work to do and the commitment to one's patients often results in a "Catch-22" situation:

You can't have eighty clinic patients in an afternoon between three residents and spend a half an hour talking to each one and give them the kind of care they deserve. . . . If you spend too much time, you keep people waiting four and five hours. To spend too little time, you're doing a disservice to the patient. You just have to accept it. There's no way you are going to change the system. [27]

The "excitement" and "challenge" and "commitment" which motivates these physicians to endure such long, hard hours is mixed with a sense of anger and frustration at the system which fosters it. Residents feel that training "doesn't have to be this way," that it could and should be "more humane." They feel "exploited." They talk of the profession's ideology, which maintains that the internship experience "will make you a better person," that it is "the crucible" in which physicians are formed. This is not so, according to our respondents. Neither they

nor their patients benefit: "I'm not so sure it made me a better person. And I'm not so sure my patients were done a favor." One resident explains that "you just can't put in 100 percent effort":

I mean, I think it would be perfectly reasonable to have more sleep than I do and do a better job. There are times, you know, when you've gotten your fifth admission and it's three in the morning and they're calling you for another one and you know there are eighteen other things going on. You just can't do it. [18]

The first year of training is the most difficult. "An intern is not a happy person," one resident said sarcastically. Many found it hard to believe they could in fact "survive the first year." One woman, in the midst of her first year, could not "even contemplate" what was ahead. There are few kind words used to describe the experience of being a resident, despite overall satisfaction with particular programs. Their experience is "notoriously awful," "abominable," "horrendous," "horrible," "murder," and "brutalizing." At some point during their training, residents ask themselves: "What am I doing?" "Why am I doing this?" "How did I get here?"

We see each other in the ER at 3:00 AM and nobody has taken a shower and everybody looks like they are dying and you are standing there talking to some ninety-nine-year-old alcoholic and you just look up and wonder, why are you doing this?

The answer, although often unspoken, is clear--to be a physician.

Specialty Board Certification

Perhaps the final phase in the formal process of becoming a physician is obtaining board certification in a specialty. With the rise in specialization has come the growth of specialty societies and specialty boards. These boards were established to certify the clinical competence of physicians in the specialties. Each specialty

governs its own board and requirements. Although board certification is not a legal requirement for the practice of a specialty, it provides greater acceptance of the physician in the medical community, including membership in professional societies, hospital affiliations, and even patient referrals.

To become board certified, a physician must attain a certain level of training and pass an examination in the specialty area. Most often, there is a written as well as an oral examination. In some situations, however, it is not possible to be certified before beginning a specialty practice. Some boards require that a physician be in practice for a certain number of years before becoming eligible to apply for examination in the specialty.

To date, there are twenty-two approved medical specialty boards. The largest are internal medicine, surgery, pediatrics, obstetrics, radiology, psychiatry, neurology, and pathology. (Large boards include many subspecialties.) (Mechanic, 1978)

Nearly two-fifths of all physicians in the population were board certified as of 1973 (Martin, 1975). Although a physician can limit his practice without certification, the tendency to obtain certification is growing. Of those who graduated medical school prior to 1950, 43 percent were certified, compared with 54 percent who graduated during the 1950s. Between 1968 and 1973, the number of certified physicians increased by as much as 53 percent. (Lee et al, 1976; Wechsler, 1976; Mechanic, 1979).

It is interesting to note that a greater proportion of physicians expect to become certified than actually do. Cuca (1979), in a study of 1978 graduates, indicates that over 90 percent of both men and

women definitely planned to become board certified. This is considerably less than the proportion of physicians actually certified.

Nearly one-half (47 percent) of the physicians in practice in our AMA sample are board certified in at least one specialty (excluding those who are currently in postgraduate training). As would be expected, the proportion of physicians who are certified varies with each specialty area (Table 3). Psychiatry, without contest, has the largest proportion of certified physicians (82 percent). Radiology (except for "Other") has the smallest, 36 percent, preceded closely by General Practice, with 39 percent.

Table 3

Board Certification, by Specialty Area

	<u>Percent</u>	<u>Number of Persons</u>
General Practice	39	(543)
Internal Medicine	55	(530)
Surgery	58	(478)
Pediatrics	53	(178)
Obstetrics	57	(165)
Radiology	36	(257)
Psychiatry	82	(152)
Anesthesiology	53	(101)
Pathology	68	(93)
Other	20	(455)

Whether or not one is certified seems to be related to age at matriculation to medical school. Overall, those who begin at the traditional age (age twenty-seven or younger) are more than twice as likely as

those who begin after age twenty-seven to be certified (66 percent compared with 35 percent).

We have been concerned here with the formal process of medical education and training, ranging from the very beginning, application to medical school, through the final phase, board certification. Our specific interest in this chapter and throughout the research is the impact of age at matriculation on the process of becoming a physician. The issue of specialty choice, while dealt with in this section, will be described more completely in the subsequent chapter. It is among the most critical decisions a medical recruit must make, in that it governs much of his future career.

Notes

¹For a review of the sociological literature, see for example, Samuel W. Bloom, "Socialization for the Physician's Role: A Review of Some Contributions of Research to Theory," in Becoming a Physician: Development of Values and Attitudes in Medicine, Eileen Shapiro and Leah M. Lowenstein, eds. (Massachusetts: Ballinger Publishing Company, 1979), pp. 3-52.

²Medical schools are becoming less homogeneous with regard to sex. Although still underrepresented, women now account for approximately twenty-five percent of first-year classes in recent years. (Gordon and Johnson, 1978).

³The difference between married and nonmarried medical students, regardless of age, has been described in the literature. See, for example, Becker et al, 1961; Coombs, 1971, 1978.

⁴In a recent survey, medical school graduates serving their first year of residency training said their educational debts averaged \$18,650. This amount is double the debt of those who graduated three years earlier (New York Times, March 8, 1981, p. 46).

⁵Such a status is referred to in the sociological literature as a "master status." That is, one status has particular significance, in terms of its importance or time devoted to it, and takes precedence over one's other statuses. More generally, the term "status" refers to one's position in the social structure. It determines where a person fits into society and how he is expected to relate to other people. For a more complete discussion, see Donald Light and Suzanne Keller, Sociology (New York, 1979).

⁶There has been considerable attention in recent years devoted to the subject of medical marriages, both in the popular and scientific literature. See, for example, Perlow and Mullins, 1976; Eisenberg, L., 1981; Fine, 1981.

⁷Overall, the divorce rate for female physicians (not necessarily students) is higher than for males (Jones, 1977). This parallels the higher divorce rate for dual career couples compared with traditional couples (Nadelson and Notman, 1979).

⁸There has been less concern with graduate medical training as an area of study than with undergraduate education. There are several studies worth noting, however. See, Mumford, 1970; Miller, 1970; Light, 1979.

⁹For a history of graduate medical education, see for example, Stevens, 1971; and Stevens, 1978.

¹⁰The length of time required for specialty training varies with each specialty. Board certification in internal medicine, for example, requires a minimum of three years, while thoracic surgery may require up to seven years (Wechsler, 1976).

¹¹About fifty years ago, many of the most prestigious hospitals associated with medical schools began to expand their teaching functions for interns and residents. At first, this was confined to hospitals affiliated with medical schools. Gradually, however, other hospitals began to realize the utility of interns and residents in terms of patient care. (Freeman, 1979). See, Robert Derzon, "The Marriage of Medical Schools and Teaching Hospitals," Journal of Medical Education, 53 (January, 1978):19-26.

¹²In recent years there has been considerable attention devoted to the period of postgraduate training in terms of its effect on the physical and emotional well-being of the physician. (See for example, Werner and Korsch, 1979; McCue, 1982). A series of strikes by interns and residents (1975, 1976, and 1979) in New York City highlighted the issue of the "number of hours worked," often up to 120 per week, as being detrimental to the physician and consequently to the patient, in that "good" patient care cannot be administered by an individual who is fatigued. A number of empirical studies have, in fact, documented the effect of loss of sleep on sensory and motor skills as well as affect (see for example, Friedman et al, 1971). Several young physicians have written personal accounts (often under a pseudonym) of the internship and residency experience (see for example, MacNab, 1971, for a chronicle by a medical student; and more recently, Shem, 1980; Barnett, 1982).

Chapter 6

Specialty Choice

The decision to pursue medicine as a career is only one step in a series of career decisions that the medical recruit must make in a sequence which, once started, follows an ordered pattern. Midway in the medical school years, in the third year, the student is virtually forced to decide about specialization, for he must apply for his residency training. Should he specialize? If so, which is the appropriate area? Do such decisions relate to societal needs?

In recent years, medical educators and planners have become increasingly concerned with the problems of health care distribution, with the focus on the need for more patient care generalists. The evidence is that despite efforts to shift the specialist-generalist ratio toward general practice, a fifty-year trend toward specialization continues to attract new graduates.

This chapter will focus on the career choices of those who begin medical school at a later age. Since they tend to differ from younger matriculants in terms of background, medical training, and orientation to the profession, we might expect that they will differ in their career choices as well. It has been suggested in the literature that older students are more likely to enter general or family practice. What do our findings suggest?

Background: The Growth of Specialization and the Decline of General Practice

The occupational climate of medicine in the United States is dominated by specialization (Stevens, 1971). Specialization refers to the concentration of physician's practice on a particular type of illness (e.g., diabetes), on a particular part of the body (e.g., ophthalmology), to a limited age group (e.g., pediatrics), or to a specific set of services (e.g., anesthesiology) (Wechsler, 1976). Several factors promoted the development of specialization, particularly in the last fifty years. There was a concern among physicians to upgrade the quality of medical care by providing specialized training for physicians. In the process, physicians attempted to gain special privileges in certain areas. In addition, it is argued, advances in technology, knowledge, and research created a complexity to the profession that forced a specialized division of labor. Consumer demands, governmental policies, and health insurance reinforced the trend (Wechsler, 1976; Lee et al, 1976).

The extent to which medicine has been divided into specialties and subspecialties has been described by Mechanic (1978:383) as "the most salient aspect of medical organization" today. According to Rogers (1978:18), it has ". . . profoundly changed the character of medical practice, the kinds of doctors who work in it, and its major place of business." At the turn of the century, unlike today, medical care in the United States was based on the premise that ". . . each family should have a responsible physician, that the majority of doctors would be general practitioners giving care to their constituents, and that a small cadre of specialists would offer consultation and

special services to those rendering general care" (Rogers, 1978:17). Today, however, general practice is a career that is followed by a relatively small proportion of physicians. This is partly because medical students are not exposed to primary care settings during their training, at least not for long periods of time. The role models tend to be specialists rather than generalists. Moreover, the emphasis in academic medicine is on investigative skill rather than ability as a practitioner (Lee et al, 1976). Not only are the specialties more admired within the profession; general practice is often in disfavor (Noack, 1980). The generalist, according to Mechanic (1976:109) is often seen as a "second class doctor." Noack (1980) summarizes the factors associated with the low appeal of general practice:

. . . the lower status, income, and self-image of the general practitioner as well as his more limited social and cultural opportunities; his harder work and limited technical and personal satisfaction due to the difficulties involved in measuring and observing the outcomes of his work; his lack of contact with the medical school and the university; the low level of appreciation of medical teachers for the nature and scope of his work; the scarcity of training programs and courses related to primary health care; and finally the inadequate selection of medical students (pp. 175-6).

The declining status of general practice in medicine, long ingrained, began to become a matter of official concern to medical educators about twenty years ago. By 1966, "a landmark" year in "medical education circles" (Walsh, 1970:1193), three significant reports, independently conceived and published, called for the "upgrading of the training and status of the general practitioner" (Lerner, 1974:31).

The Millis Report (1966) discussed the barriers to careers in comprehensive medical care, such as "low status," "lack of appropriate educational opportunities," and "conditions of practice":

To a large extent [barriers] have developed because of specialization and fragmentation of practice brought about by greatly increased knowledge and the mastery of new skills and new techniques. Now, in order to bring medicine's enhanced diagnostic and therapeutic powers fully to the benefit of society, it is necessary to have many physicians who can put medicine together again. (Quoted in Walsh, 1970:1193)

The "Folsom Report" and the "Willard Report" (see Walsh, 1970; Lerner, 1974) further elaborated the need for a new kind of physician--one who would provide coordinated, comprehensive health care to individuals and their families. These recommendations were instrumental in the approval of Family Practice as a new specialty in 1969. The physicians who practice family medicine have been referred to as "today's answer to yesterday's general practitioner" (Wechsler, 1976:23). To meet the legitimacy requirements of the current professional trend toward specialism, family practice, instead of the separate status of general practice, is seeking the equal status of a specialty. Specifically, this adds the customary extended period of specialty education and board certification by the American Board of Family Practice. To be eligible for certification as a family practitioner, a physician must complete a three-year residency in family practice which has been approved by the Council on Medical Education of the American Medical Association. A major consideration was to make "the new 'family practice'" more attractive to students whose primary exposure in medical school had been specialties rather than general practice (Overpeck, 1970:185). In addition, it would provide an academic discipline for general practice oriented students who had previously been isolated by the specialty and research orientation of most medical schools (Jonas, 1978).

Those who practiced general medicine prior to 1969 typically completed only the mandatory one-year internship after medical school

before beginning the practice of medicine (Walsh, 1970). An approved residency in general practice (without a recognized specialty board) had existed prior to 1969, but only a small number of physicians took advantage of it. For instance, in 1960 there were 364 residents in general practice--approximately three percent of all residents-in-training at that time. The number declined slowly, but steadily, reaching 256 in 1968. In 1970, the first year of family practice residencies, the number of general practice residents dropped substantially from 256 to 144. The general practice programs in existence tended to be more "service oriented than educational" (Lerner, 1974:34-35). This, plus the notion that general practitioners were essentially "dropouts" from post-graduate training added to their low image in the profession (Rogers, 1980:17). Hence, with the overall growth of specialization and the advent of family practice, in particular, the number of positions filled in general practice declined as physicians lost interest in general practice. This was particularly apparent among American medical graduates, so that foreign graduates began to enter these programs in greater numbers.

The American Academy of Family Practice (formerly the American Academy of General Practice) continues to work toward upgrading the standards and status of the general/family practitioner (Lerner, 1974). One provision for family practice, which enhances its image, is the requirement for recertification, a unique requirement among national medical associations. The family practitioner must complete 150 hours of continuing education every three years to retain membership in the Academy (Walsh, 1970).

The Growth of Family Practice

Since the advent of family practice as a specialty and the organization of family practice residency programs, a growing number of graduates are opting for careers in family practice. In 1970, there were just a handful of programs in the country; by 1979 there were more than 360 programs with over 6,000 residents. The high level of interest is suggested by several factors: available programs have been continuously oversubscribed (e.g., 2,600 graduates applied for 2,200 first-year positions in 1978); the attrition rate is very low (less than 3 percent); the caliber of students compared favorably with the more traditional specialties (Geyman, 1979).

Current federal manpower policy calls for a minimum of 50 percent of graduate medical education positions to be in the three primary care areas (family practice, general internal medicine, pediatrics), with 25 percent of all positions in family practice. Only time will tell whether this will effectively redistribute health manpower to meet the nation's needs (Rogers, 1980).

Current Distribution of Physicians by Specialty

Despite efforts to increase the number of general/family practitioners, the current proportion of such physicians is only 15 percent. (Table 4) Our own AMA sample data reflects this pattern, with 17 percent in general/family practice.

It is projected that in spite of the efforts to increase general/family practice training programs, there will be a decline in generalists by 1990 to 36,700 from the 1970 figure of 56,260 (Lee et al, 1976). The projected decline is already apparent. Between 1964

Table 4

Specialty Choice: U.S. Physician Population and AMA Sample Compared

	<u>U.S. Physicians (1978)</u>	<u>AMA Sample (1977)</u>
	%	%
General Practice ^a	15	17
Internal Medicine	21	20
Surgery	21	16
Pediatrics	7	7
Obstetrics-Gynecology	6	6
Radiology	5	8
Psychiatry	7	5
Anesthesiology	4	3
Other	<u>14</u>	<u>18</u>
Total	100 ^b	100 ^c
(Number of persons)	(375,811)	(4143)

^aThese nine specialty groups are obtained from the thirty-six specialties used in the AMA's Physician Distribution and Medical Licensure Series. The nine categories include the following specialties: General Practice (General Practice and Family Practice); Internal Medicine (Internal Medicine, Allergy, Cardiovascular Disease, Gastroenterology, and Pulmonary Disease); Surgery (General Surgery, Neurological Surgery, Ophthalmology, Orthopedic Surgery, Otolaryncology, Plastic Surgery, Thoracic Surgery, and Urology); Pediatrics (Pediatrics, Pediatric Allergy, and Pediatric Cardiology); Radiology (Radiology, Diagnostic Radiology, and Therapeutic Radiology); Psychiatry (Psychiatry and Child Psychiatry); Other (Aerospace Medicine, Dermatology, Forensic Pathology, Neurology, Occupational Medicine, Pathology, Physical Medicine, Public Health, and General Preventive Medicine, as well as other or unspecified areas).

^bSource: Wunderman (1979)

^c4143 represents total AMA sample. However, in some subsequent analyses only those in-practice will be included.

and 1974, the number of general/family practitioners dropped 26 percent. At the same time, there was a 38 percent increase in those limiting their practice to a specialty. Within the specialties, the largest growth was in the medical specialties (49 percent) and the least amount of growth was in the surgical specialties (28 percent) (Wechsler, 1976).

The AMA data allow us to look at these trends in greater detail. If we consider year of graduation from medical school and specialty choice, there is evidence of continuing movement away from general practice toward the specialties, from 1963 to 1972. (Table 5)

Table 5

Specialty Choice by Year of Graduation from Medical School 1963 - 1972
(Physicians-in-Practice)

	<u>1963</u>	<u>1968</u>	<u>1970</u>	<u>1972</u>
	%	%	%	%
General/Family Practice	25	16	17	15
Internal Medicine	14	16	20	23
Surgery	16	18	18	15
Other ^a	<u>45</u>	<u>50</u>	<u>45</u>	<u>47</u>
Total	100	100	100	100
(Number of persons)	(805)	(590)	(592)	(663)

^aTo simplify analysis, pediatrics, obstetrics-gynecology, radiology psychiatry, anesthesia, and other (see note b, Table 3, for details) were combined. The raw data revealed only minor differences for each of these specialties by year of graduation. And, each specialty accounted for fewer than 10 percent of respondents.

We see that one-fourth of those who graduated in 1963 entered general medicine, whereas among 1972 graduates, the proportion decreased notably to 15 percent. The proportion choosing internal

medicine increased by one and one-half during this same period, from 14 percent to 23 percent. Surgery remained fairly constant during this period.

If we examine the distribution among physicians currently-in-practice (Table 6) by age at matriculation, we see that in spite of the overall trend away from general medicine (general practice and family practice), a substantial proportion of older matriculants continue to practice it--just about one-fourth. This is compared with approximately one-tenth of younger matriculants. However, the difference between younger and older matriculants is more striking among general practitioners than among family practitioners. Older matriculants are four times as likely as younger matriculants to become general practitioners (13 percent to 3 percent) and twice as likely to become family practitioners (11 percent to 6 percent). Twice as many younger matriculants enter family practice compared with general practice (6 percent to 3 percent). So, when general medicine is chosen by younger matriculants --although an unlikely choice--they clearly opt for specialty-status, i.e., family practice, rather than a non-specialty-status, general practice. This is in keeping with the overall tendency of younger matriculants to specialize more than their older classmates.

Younger matriculants tend to be found in internal medicine and surgery. They are nearly twice as likely as older matriculants to be internists (25 percent to 13 percent) and one and one-half times as likely to be surgeons (21 percent to 13 percent). Age at matriculation makes little difference for most of the other specialty areas, with similar proportions of each group choosing anesthesia, radiology,

pediatrics, and psychiatry. Among those who choose obstetrics-gynecology, the difference is numerically small (5 percent), but worthy of mention since older matriculants are twice as likely to enter it (10 percent to 5 percent).

Table 6
Specialty Choice by Age at Matriculation
to Medical School
(Physicians-in-Practice)

	<u>Age at Matriculation</u>	
	<u>Younger</u>	<u>Older</u>
	<u>%</u>	<u>%</u>
General Practice	3	13
Family Practice	6	11
Internal Medicine	25	13
Surgery	21	13
Other ^a	<u>45</u>	<u>50</u>
Total	100	100
(Number of persons)	(1169)	(1783)

^a See note a, Table 5.

It is suggested, then, that those who matriculate at an older age in some way contribute to our nation's manpower needs in ways not being met by other physicians. In essence, they are less likely to be specialists and more likely to be generalists than those who matriculate at the typical age. It is also evident, though, that they are moving in the direction of the more typical medical recruits. (Table 7)

Table 7

Specialty Choice by Age at Matriculation
and Year of Graduation
(Physicians-in-Practice)

	<u>1963</u>		<u>1968</u>		<u>1970</u>		<u>1972</u>	
	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>
	%	%	%	%	%	%	%	%
General/ Family Practice	10	32	8	22	9	23	10	19
Internal Medicine	23	10	22	11	28	13	28	18
Surgery	25	12	24	12	19	18	15	15
Other ^a	<u>42</u>	<u>46</u>	<u>46</u>	<u>55</u>	<u>44</u>	<u>46</u>	<u>47</u>	<u>48</u>
Total	100	100	100	100	100	100	100	100
(Number of persons)	(251)	(554)	(270)	(320)	(272)	(320)	(296)	(367)

^aSee note a, Table 5.

Among those who graduated between 1963 and 1972, the proportion of older matriculants designating general/family practice as their area has declined sharply (32 percent to 19 percent). In contrast, the proportion of younger matriculants who designate general/family practice has remained constant, with one-tenth designating themselves as such each year. During the same period, there has been a slight increase among younger matriculants in internal medicine, 23 percent to 28 percent. The proportion of older matriculants in internal medicine has nearly doubled, however, 10 percent to 18 percent. Interestingly, younger matriculants seem to be moving out of surgery; among 1963 graduates one-fourth were surgeons, whereas in 1972 the

proportion dropped to 15 percent. Older matriculants, on the other hand, are very slowly moving into surgery, with an increase during that period from 12 percent to 15 percent.

Career choices within medicine, then, tend to be age-linked: general/family practice is more typically chosen by older matriculants, while internal medicine and surgery are more likely to be chosen by younger matriculants. Since our focus in this research is on older matriculants, we are concerned with three issues:

- the way in which older matriculants differ from younger matriculants (particularly their tendency to enter general/family practice)
- the way in which older matriculants differ among themselves (particularly those who choose the specialties more often associated with younger matriculants)
- the way in which older matriculants are similar to younger matriculants (particularly in their choice of areas other than general/family practice, internal medicine and surgery).

Choosing a Specialty

General Practice

In spite of the trend away from general medicine, the fact remains that some physicians have chosen it as their career and continue to practice it. If efforts to recruit recent graduates into general/family practice are to be successful, it becomes necessary to understand what makes this field attractive to some physicians and not others. What factors differentiate general/family practitioners from specialists? Since the majority of physicians choose specialty areas,

rather than general/family medicine, the literature tends to focus on the differences among specialists in terms of social background, personality, education and training. Little attention has been devoted to those who do not specialize. One factor, however, which has received some attention is the age of a medical recruit at the time he decides to pursue medicine as well as at matriculation.

Rosemary Yancik (1977: 78) looked at the association between the "time of commitment to the medical profession (that is, the making of a definite commitment to become a physician) and an outcome of the decision (the selection of a field of concentration in medicine)." She found that there is an association between age of commitment and subsequent specialty choice. Students who became surgeons made the earliest commitment to medicine, with 17.5 percent doing so before high school. Only 6 percent of those who entered family or general practice made the decision that early. In fact, they made the latest commitment to medicine, with nearly 18 percent deciding after finishing college.

There is also evidence that age at matriculation to medical school is related to specialty choice. Those who delay entrance to medical school are more likely to enter general/family medicine (CONSAD Report, 1973). Two of the early studies demonstrating this relationship focus on the post-World War II era. Weiskotten (1960) found that the 1950 graduating class had a very different age composition than that of earlier classes, with a median age of twenty-eight. Forty-three percent of these graduates were over age twenty-nine. This was an atypical period in that nearly one-half of the graduates had served in the armed forces prior to entering medical school. For this class, 86 percent of those under age twenty-four at the time of matriculation

limited their practice to a specialty; only 26 percent of the graduates who were twenty-nine or older did so. In a subsequent study of both the 1950 and 1954 graduating classes, Lyden et al (1968) found a similar pattern. This has been confirmed by other research (see, Monk and Terris, 1956; Kandel, 1960; Monk and Thomas, 1973; Gordon, 1978; Aho, 1972; Rosengren, 1980).

What is it about being older that may explain the greater propensity toward general medicine? To what extent do background and medical training affect the career decisions of younger and older matriculants?

Social Background

As we have seen in our sample (Chapter 3), older matriculants tend to come from lower socioeconomic backgrounds (using father's occupation as the principal indicator). In the literature, however, the evidence regarding the effect of socioeconomic status on career choice is not as clear. According to Kritznier and Zimet (1967), the prestige of the specialty chosen by medical students shows an inverse relation to father's occupational status. We would expect, then, those from lower class backgrounds to choose the specialties rather than general/family practice since the former are more prestigious. Krause (1971) takes an alternate view, however, by suggesting that those from the upper classes are the ones most likely to be specialists.

There are very few studies which have empirically examined prestige differences among medical specialties. Even the existing studies are not comparable because they use different types of physicians to do the ranking (e.g., medical affiliation, geographic

location), they use different categories and numbers of specialties, as well as different criteria (for examples of these studies, see Shortell, 1974; Schwartzbaum and McGrath, 1973; for an earlier study, see Reader, 1958). By comparing Shortell, Schwartzbaum and McGrath, and Reader, we are able to distinguish crudely between specialties which are ranked high and those which are ranked low. Regardless of the scheme used, general/family medicine is ranked considerably lower than internal medicine or surgery. Internal medicine and surgery are among the more highly ranked specialties, when all are considered.

From our AMA data, it appears that the younger one is at matriculation, the more likely is the choice of the more prestigious specialties. Although interview respondents were not asked specifically about prestige as a criterion in specialty choice, they were asked to describe how they chose their designated area and why. Prestige as a consideration, either its presence or absence, appeared only indirectly. Among those who chose general/family medicine, some alluded to the low image of this area within the profession as well as in society. One referred to himself as "low man on the totem pole"; another said he "had an inferiority complex" because he never finished his residency in internal medicine.

Correlated with prestige is the income yielded by a specialty. While it does not always follow that the high prestige areas have the higher incomes (and vice versa), at least for the three areas under consideration there is some association. For physicians in practice in 1977, surgeons had the highest net income of \$74,000; internists had the fourth highest with \$61,000; and general practitioners the sixth with \$51,000 (Glandon and Shapiro, 1980). It seems that the highest

paying areas, notably internal medicine and surgery, more often attracted the younger matriculants. Our respondents were not concerned with income in career choice, neither the generalists or the specialists. At least, it was rarely mentioned as a factor. Perhaps the lack of obvious concern with prestige (or its correlate, income) is due to the fact that prior to pursuing a career in medicine, most of our respondents had achieved success in other ways. They had proven themselves academically, in that one-third had Master's degrees or doctorates. They worked as nurses, social workers, public school teachers, college teachers, biologists, chemists, programmers--all of which demanded administrative ability, policy-making, and strong interpersonal skill. And, they were well-paid for their efforts. One woman, in "social medicine," formerly worked as a school counselor and administrator. Had she not pursued medicine, she might have become one of "the youngest school principals" in her district. She had achieved success as measured by professional and public recognition, and financial remuneration. Money, she indicated, was not important to her and certainly was not a motivating factor in choosing medicine. She said: "I will never be a big money earner in medicine since I consider fee-for-service practice immoral." In fact, given her debts and what it will cost her to repay them, she feels she "probably lost financially by choosing to spend that time in medicine":

In a sense it struck me as hysterical that when I started . . . as an intern, I was being paid less than what I was being paid [in a previous position]. And six years had passed. [10]

A pediatric resident, who spent considerable time talking about the debts he incurred in order to pursue medicine, was asked if that might affect his decisions about specialty and practice arrangements:

If I were out primarily for money, I would go into business. Because in the business world you can make a hell of a lot more money than you can as a physician. A physician lives very well, but putting into the business world what I put into medicine, I'd earn five times the amount. [38]

The lack of concern for money is further reflected in the case of a woman who chose surgery, the most lucrative of the specialties. It is also among the most demanding of the specialties. She talked about the pressured lifestyle of the surgeon and how it affected her decision to choose surgery:

I always thought that the thing that would protect me and allow me to do it was that I don't need to make that much money to be happy. I don't have anybody to worry about but myself and I am not that extravagant. I'd much rather have the time than the money. [11]

Another respondent who worked as a pharmacist for eight years prior to medical school wondered how he and his wife and two small children would survive financially in Mexico during his education. It turns out they did without a phone and made twelve trips to Mexico "in a Volkswagen" and approximately fifteen years later, he "still has the car." His lack of concern with material things, yet his awareness of the image of physicians in our society is reflected in the following statement: "It doesn't bother me to pull into the doctors' lot next to a Mercedes. . . . Material things have lost their importance and I couldn't say that before medical school." When asked what accounted for his change in attitude, he replied simply: "Just realizing what is important."

More important than money or prestige seemed to be a desire to serve humanity. Rosengren (1980:125) suggests that a later decision to study medicine is "more considered and realistic"--not framed in "stereotypic and unrealistic terms." Thus, it is more likely to lead

to family medicine or so-called "'humanistic'" medicine. In contrast, he states, the "glamour specialties" attract more of the early deciders. This is apparent when we consider the prior commitments of our older respondents. Most had been employed in "service-type" occupations. Among those who chose general/family medicine were a pharmacist, a police detective, a teacher, and a homemaker. (The AMA data do not allow such analysis, since there is no information on previous employment or education.) They tended to bring their former skills and attitudes to the practice of medicine. For example, the police detective feels that his previous work has influenced him as a physician:

When I treat a patient, I try to treat the total patient. I worry about their psychological comfort, what's bothering them that is making them sick. It's not just because they have a cold or sore throat. There are many factors that go into why people are sick. And I try to be aware of them. And I think having done the type of work that I have, I think I've become attuned to and very aware of what they're talking about. [2]

A former pharmacist has similar feelings about the significance of his previous work. He attributes his ability to deal with patients as "just a natural thing," to the days when customers came to his pharmacy and told him "the complaints they would never tell their doctors" because "they didn't understand anything the doctors told them":

You have a better idea of what is wrong with the patient if you know the whole family. By knowing the whole family situation, you can tell whether the problems are emotional or physical. (Quoted by Steyer in the Star Ledger, April 4, 1979) [24]

The skills involved in being a mother of eight children were brought to the practice of medicine by a former homemaker:

I devoted myself to my family for twenty-four hours a day. Now, I have an extraordinarily large family. For example, if I am at a conference or on vacation (usually combined), I find myself worrying about my patients as I did about my children. [16]

This concern for the social, emotional, and physical well-being of their patients, as expressed by the three respondents immediately above, is part of a larger commitment to the community in which they practice. Each returned to his hometown after medical school to set up practice. The decision may have been a practical one, in that it is probably easier to practice in an area with firmly established ties; however, it seems that the decision goes beyond practicality. There was a desire to return something to the community, especially apparent in the case of the police detective and the pharmacist. Each made a special promise before going to medical school--one more private, the other more public.

The detective said he "always wanted to be a GP and work with old people." "I promised myself that if I was ever successful, that I would take care of old people." What better way than to return to the old Italian community in which he was born and raised, where he now fills a particular need because he makes house calls in an area in which "very few other physicians do." "I enjoy making house calls, believe it or not," he remarked:

As a GP you get a lot of calls. Some of the patients I even give my home phone number. Some of them are very sick, on medication, and they get panic-stricken. That's why it's very difficult for me to go on vacation, because when I go away for a week, I have all these old people and nobody goes to see them. A lot of doctors today will not make house calls. If I don't see some of these old folks, nobody goes to see them. Which is unfortunate. [21]

Socialization

The orientation in most medical schools today is toward specialization. Students have relatively little exposure to general practice settings and to general practitioners during their training. This emphasis on specialization is made apparent to students both in

terms of the curriculum and the attitudes of those participating in their education. Kendall (1982) has suggested that although some students come to medical school with a firm intention of entering general practice, they have little firsthand opportunity to see what general practice is like. The prevailing role models are specialists so that socialization pressure is toward specialization and may even be negative toward general medicine.

The experience of one physician, in particular, that we interviewed illustrates such an atmosphere. The medical school he attended in the New York metropolitan area did not offer an elective in family practice. According to our respondent, this was "more than subtle" pressure to choose a specialty. Nevertheless, he persisted in obtaining permission to do a family practice rotation at a midwestern school, since he seriously wanted to consider family practice as a career choice. He said, however, that "the administration made a very strong pitch to me not to go into family practice":

They don't believe in it. They're part of the heavy academic eastern establishment that gives its rationalization something along the line of, 'It's impossible to be a good family practitioner.' That the amount of information necessary in the various fields that a family practitioner attempts to practice in is so overwhelming that it would require a dozen years of residency to really do a good job. And, one is faced with the possibility of not doing a good job, or of being a triage nurse, referring out all the interesting patients to the real doctors. [27]

Asked if he believed that ideology, he said, "No!" Rather, he saw it as a "justification for [faculty] desire to remain in control of the specialties." But the "pressure [was] definitely present" to stay away from general practice, at this school as well as elsewhere.

Another respondent, who attended a prestigious school in the Midwest, had a similar experience:

. . . You don't want to be a generalist. You want to be a specialist. They dump continuously on the generalist. They call them LMDs--local medical doctors. It's not a compliment. [10]

This physician ultimately chose "social medicine" as an area, but nearly got sidetracked into "hematology" because she "never saw a community physician":

. . . you always want to be like whoever is teaching you. At one point, I considered hematology. That's what I'll be. I'll be a hematologist. I just saw myself as doing these incredibly little specialized things. . . . Thank God there are hematologists when you need them, but that's not why I had gone to medical school. [Emphasis mine]

This last remark suggests one explanation for the tendency of older matriculants to choose general/family practice more often than younger matriculants, despite the prevalence of specialization in medical education--that is, they decide on general medicine prior to entering medical school. We have already seen that older recruits differ from younger ones in their social background, particularly in terms of socioeconomic status and previous employment. Further, the type of medical school one attends (quality, location, or type of control) is less likely than age to have a bearing on one's specialty choice (see subsequent discussion). It may be, therefore, what older matriculants bring with them to the medical school experience rather than what happens during their training that accounts for their greater propensity to general practice. In fact, they may receive further encouragement while in medical school. The qualities that older matriculants have, in terms of their behavior and attitudes, were perceived by faculty as more appropriate for general medicine than specialty medicine, at least in the case described below. One general practitioner recalls the encouragement he received to enter general practice:

One of my professors in Italy said to me--he was the director of clinical medicine--very big man--he said to me . . . 'If you go into anything but general medicine I'll be very disappointed. You have a natural talent for doing general medicine,' and not to do anything else. He said as a specialist, you lose that touch. [2]

We must ask, though, why older matriculants are less likely to be influenced by the emphasis on specialization once in medical school. After all, aren't they exposed to the same environment and values as their younger classmates? Maybe not. Older matriculants, as we have seen (Chapter 5), are not as firmly entrenched in the medical school setting and thus less likely to be under its influence. Older students, compared with younger ones, spend little time in medical school activities, or socializing with peers and faculty. Rarely do they live on campus or in similar residential settings. Consequently, they probably have less access to the networks of communication and sponsorship which are necessary for the pursuit of a specialty (see, Hall, 1946 and Marshall, 1978).

In addition to the fact that older students appear to be less available for such sponsorship, we must also consider the possibility that faculty would be less likely to seek them out. We cannot ignore the attitude in the profession toward older recruits. For the most part, they are not seen as appropriate candidates for medical school. This attitude may be reflected in the behavior of some faculty toward the older students and may be so subtle as not to be perceived by the student. Older students may not be encouraged to enter specialties. Application for and acceptance to residency programs depends to a large extent on the recommendations of faculty. This is particularly so for the more desirable or prestigious programs. According to Krause (1971: 119), "it is common for medical school faculty to use their personal

influence and professorial prestige to get young protégés into the right hospital at the right time" for postgraduate training. While in some cases older students, simply because of their age, are seen as less deserving or appropriate, we must also remember that they may actually not be as qualified as some younger students for certain programs. Academic performance and grades, as we have seen, were not of utmost importance to most older students. Their performance was average. While this is sufficient for some specialties and residency programs, the more prestigious ones typically demand more.

Thus far, our discussion has been mostly speculative. While we know that older matriculants differ from younger ones in terms of social background, type of training, and specialty, it is hard to determine cause and effect. For instance, if older students enter medical school, or decide early on that they prefer general/family practice to specialty practice, then that may account for their relative isolation in school and their lack of concern for academic performance. Or, is the preference for general rather than specialty practice the outcome of this isolation and poorer academic performance? And, is this isolation by choice or default? Such isolation perhaps protects the older matriculant who comes to medical school with the intention of general/family practice from being swayed toward specialization, or it may act against the older matriculant who wants specialization, but is not encouraged to choose it.

General Practice versus Specialty Practice: Preference or Choice

Thus far, we have seen that older matriculants more often than younger ones choose general/family medicine. There has been some

attention in the literature to the issue of satisfaction with medicine, in general, as a career choice (for summary, see Mechanic, 1976: 395-97). But there has been little information on satisfaction with one's specialty area within medicine. One fairly recent study attempts to deal with this gap (Mattheson and Smith, 1977). The authors distinguish between "preference" and "choice" with regard to specialty areas (see, Vroom, 1964, who first used this classification with regard to career choice in general):

An occupational preference is that occupation [specialty] which at a given time an individual would most like or prefer to enter. The chosen occupation is that occupation [specialty] which an individual chooses to enter and subsequently engages in behavior to implement that choice (p. 548).

Mattheson and Smith found that the area most frequently chosen by students who indicated a preference for another area was family practice/general practice. They explained this, in part, by the fact that students perceived the demand for general/family practice over the next ten years to be higher than any other specialty. Other factors which affect one's choice are: nature of training, lifestyle, nature of the work, and colleagues. While many of these factors were important to respondents who chose the traditional specialties rather than general/family practice (see following section), length of training was the only factor mentioned by older matriculants as a reason for choosing general practice when in fact another specialty might have been preferred. (Note that our interview sample includes only general, not family practitioners, and the number is very small.) The length of training as an inhibiting factor in specialty choice was noted by Lyden et al (1968) and Kandel (1960), as well.

As a case in point, one interviewee who is a general

practitioner stated during the early part of the interview that he always wanted to be a general practitioner, but later in the discussion indicated that he "wanted to go into surgery, orthopedic surgery," in particular: "That's what I loved, but it would have taken five years." After graduating a foreign medical school, he did a Fifth Pathway Program as a rotating intern and then another year, including six months of medicine and six months of surgery. He received encouragement from the faculty to continue with surgery, and was accepted in a program, but he was concerned about the time factor. He was in his forties when he graduated and he "didn't want to stay in the hospital longer than [he] had to." He admits that additional training "probably would have helped. . . ." "I'm a GP, but with no specialty." Sometimes he thinks about continuing his training:

. . . because I get very disgusted sometimes because you get pulled in fifty different ways--'Ah, I am going to become a specialist,' and then I decide to stay where I am. [2]

Thus, in this case at least, one sees age acting as a constraint to the extension of training time that specialization requires. The most strong motivation, even though general practice was part of the original choice of the profession, became specialty medicine.

A similar pattern of choice is demonstrated by another general practitioner who started out in "internal medicine" but "unfortunately" didn't complete the residency: "I would have liked to, but financially, emotionally, and my age--that made a difference. Too many debts. My age was a factor." After graduation he was able to receive on-the-job training in a clinic where he worked under the supervision of five physicians. It "was almost like I was in a training program. They turned me from a greenhorn into a practicing physician." He spent

another year in a rural, mountain practice where "there was not another doctor for twenty miles." With this pseudo-residency training, he feels "ready for general practice but certainly not ready for complicated medicine."

Although he attends continuing education courses and lectures, and studies on his own, he feels weak in the "general" knowledge of medicine. "I will never be happy with my knowledge of medicine. Some of it is that I didn't complete my residency. I have somewhat of an inferiority complex about that." He would like to continue his training in "allergy" medicine, but even before doing a fellowship in it he would have to do a residency and "that would take another four years." In the meantime, he attends conferences and lectures in allergy medicine and plans to start allergy testing in his office, with the intention of "going into allergies only" in the back of his mind. What is holding him back? "I really love family practice!" The ambivalence of this respondent is striking, but he shows no awareness of it.

There is another type who at one point indicated a preference for family practice but later chose another area of medicine. Nearly one-tenth of those we interviewed said they seriously considered family practice while in medical school. Overall, the reasons given for its ultimate rejection focus on its newness as a specialty. For example, one respondent stated that it didn't even exist as a specialty when he made his career choice in 1963, and in looking back, he realized he "would have opted for it." Instead, he chose psychiatry. There appears to be some overlap in those who considered both psychiatry and family practice. As one respondent put it, psychiatry was "the last humanistically oriented specialty" until family practice came along.

Consequently, he feels that "psychiatry is suffering" as it loses its potential recruits to family practice. For one physician, family practice meant he "could really be a doctor," whereas going into psychiatry "was not being a doctor." In addition, he could "really have an impact on people's health, make the people that were feeling bad feel good." Psychiatry, on the other hand, "was much more ambiguous."

The interweaving of psychiatry with family practice is illustrated with one woman we interviewed who had decided on family practice at the time she decided she was going to medical school. It was attractive because it "involved some pediatrics, particularly adolescent medicine . . . some gynecology . . . really everything." But, she said, "I felt that an awful lot of what people go to a doctor for is because they don't know where else to go." Therefore, she began to consider psychiatry--until she realized "that someone willing to consider psychological problems was needed more in general practice--family practice--than in psychiatry." The outcome is not what we might have expected, however. The respondent could not find a suitable family practice program in the New York City area, so she decided to do an internship in internal medicine which "would be the most useful thing to have in a future family practice." But her experience with internal medicine made her aware of the "inappropriate use of medical intervention . . . at least in the hospital treatment of patients":

I felt that patients were often hospitalized for inappropriate reasons, for the convenience of the doctor, for the convenience of the family, to manipulate the insurance coverage, to convince the patient he was sicker than he was. And then things were done to him that again were either not medically indicated or were not appropriate to his overall needs. Even if that need included being allowed to die. [1]

She became increasingly dissatisfied with both internal medicine and

family practice. Her decision to change to psychiatry was clinched during a three-month rotation in psychiatry in which she realized "there were ways of helping people without tormenting them."

Perhaps had this respondent been satisfied with the family practice programs and not been forced to choose internal medicine as a route, she would have followed a different pathway. This respondent was not alone in her dissatisfaction with family practice programs in the New York City metropolitan area. Of course, part of the problem is the unwillingness of these physicians to move to another location. Perhaps the quality of a program was particularly important given the fact that family practice is not "a very well developed field." Getting "good training" was not as easy as it might be in a more established field of medicine.

One respondent who chose "social medicine" rather than family practice had some "unresolved feelings" about family practice which impeded her decision to pursue it":

Family practice certainly stresses prevention, health maintenance, and all of the things which have to do with health. I'm not so sure that the medicalization of health is in health's best interest. . . . This is something I can't work out in my own mind--whether family practice hasn't gone far enough in incorporating alternative therapies or whether it has gone too far, and I worry about this overmedicalization of essentially health issues. [10]

Here we see that part of the appeal of family practice--its emphasis on prevention and health rather than illness--may be interpreted as a disadvantage. So it is with the diversity family practice offers in terms of type of illness and patient populations. For some, this is its primary attraction; for others, it is a source of concern:

I had originally thought I would go into family practice--which is a necessary specialty--primary care. I had done so much sort of

peripheral primary care mainly with terminal cancer and old people [as a nurse] but when I came to it, I realized it's not so easy. . . . To do OB, pediatrics--the whole thing together would be too much. I don't want to know a little about everything and to continually refer people to people who know more. [15]

Family medicine is often seen as "too broad," "too basic," with "no depth." One physician who chose psychiatry instead said that of the people he spoke with, everybody was "really quite happy" with family practice during the first five years. "But after some time, it got to be very routine."

Internal Medicine

General medicine, as we have seen, is the area which most sharply differentiates younger and older matriculants, with nearly three times as many older as younger matriculants choosing it (24 percent to 9 percent). General medicine accounts for the largest proportion of older matriculants--nearly one-fourth--when each area is considered. Internal medicine, on the contrary, is more typically a choice of younger matriculants--nearly two to one (25 percent of younger, compared with 13 percent of older matriculants). It accounts for the largest proportion of younger matriculants when each area is considered. Fully one-fourth of younger matriculants are internists, with surgeons a close second (21 percent). (Table 6)

Internal medicine provides an interesting comparison to general medicine in that both, according to current definition, are primary care areas. That is, both general/family practitioners and internists function as "physicians of first contact" (Noren et al, 1980: 15). Primary care physicians, by definition, "usually see the patient first, manage the presenting complaint, and refer the patient to specialists as they are needed, and subsequently provide the patients with

continuity of care" (Wechsler, 1976: 16). This typically includes family/general practitioners, internists, and pediatricians.

Internists, both general internists and subspecialists, see themselves as being actively involved in primary care. According to one survey, general internists devoted an average of 90 percent of their time to primary care, while subspecialists with 60 percent also perceive themselves to be delivering substantial amounts of primary care (Mendenhall et al, 1979).

How did this come about? In the early part of the century, the distinction between specialists and non-specialists (i.e., general practitioners) was clear-cut. Most medical care was carried out by general practitioners; specialists were consulted only when the patients' problems became complex. As a specialist, the internist's role was to diagnose and medically treat diseases of the internal organ systems of the adult. The internist might further limit his practice to areas within medicine, organized around organs and organ systems (e.g., kidneys, lungs, heart) or around basic disease processes (e.g., cancer, infectious disease, arthritis). The internist, traditionally, was not expected to provide continuous care of the patient once the presenting complaint was diagnosed and/or treated. But, as the number of general/family practitioners continued to decline, internists found themselves, by choice or patient demand, taking on some of the long term continuous care usually within the realm of the generalist. A former president of the American Society of Internal Medicine comments on this:

The internist now found himself in a dual role. He was sometimes a consult to the generalist in the traditional sense--and at the same time was in competition with him for primary care patients. And, in the latter situation, the distinction between the general

practitioner and the primary care internist became not a matter of kind but of degree: the internist had greater depth in his training and his approach to patient care was more deliberate and comprehensive (Felch, 1974: 3).

Today, this is complicated by the fact that the general practitioner has become a specialist. Family practice, which was designated a specialty in 1969, grew out of general practice, dropping surgery and in some cases operative obstetrics to concentrate on providing medical care for adults and children, with a particular concern for the social, economic, and behavioral aspects of illness (Jonas, 1978). Since the founding of this specialty, there have been attempts to define the actual content of internal medicine as compared with family practice (Mendenhall et al, 1979).

Faced with this situation, and threatened by a loss of status, some internists are now pursuing subspecialty care.² They become expert in a narrow field, see patients on a referral basis, and attempt to become the consultants that internal medicine was originally conceived to be. Despite these efforts, the role of the internist remains diffuse. Not only is there confusion between the internist and the general/family practitioner, but within the field of internal medicine as well, between the general internist and the subspecialist. There are those who choose internal medicine because it involves a broad range of illnesses and patients (i.e., the general internist) and those who choose it because it affords an opportunity to specialize in a limited area of medicine (i.e., the subspecialist, such as the cardiologist).

Our task here is to focus on one category of internists--those who begin medical school at a later age. What is the appeal of

internal medicine for these recruits? And, how do they compare with the younger matriculants who choose it?

If we look at the whole field of internal medicine, general and subspecialty, we see that clearly it is a choice for younger rather than older matriculants--approximately two to one (25 percent to 13 percent [Table 6]). The more gross category disguises differences between the choice of general internal medicine and subspecialty internal medicine. (Table 8) Older and younger matriculants are fairly similar in their choice of general internal medicine: 13 percent of younger matriculants choose it compared with 10 percent of older matriculants. They are disparate in their choice of subspecialty internal medicine, however. Four times as many younger as older matriculants choose to subspecialize (12 percent to 3 percent).

Table 8

Internal Medicine (General versus Subspecialty)
as a Choice by Age at Matriculation
(Physicians-in-Practice)

	<u>Younger</u>	<u>Older</u>
	%	%
General Internal Medicine	13	10
Subspecialty Internal Medicine	<u>12</u>	<u>3</u>
Total Internal Medicine	25	13
(Number of persons)	(1169)	(1783)

It is suggested, therefore, that older matriculants may be attracted to internal medicine because of the opportunity to generalize rather than to specialize. The very same characteristics which attract so many older matriculants to general/family practice may also be appealing to those who choose internal medicine.

The similarity between internal medicine and general medicine has been noted by Coombs (1978) as a result of his study of a medical school class over four years. Although at the outset, students had a hazy image of the internist, the picture they eventually formed was "pieced together from comparisons with general practitioners" who were seen as similar. Often, the internist was viewed as performing "'a glorified brand of general practice.'" Yet, the perceived similarity was also striking. "'There is not all that much difference between the two groups,'" one of Coombs' respondents said. "'They both have the same sort of problems, the same face-to-face contact with the patient, and they both get to know the patient in his entirety and become involved in total patient care.'" In addition to playing a similar role, internists and general practitioners are seen as having a similar disposition. They both are "pleasant, service-oriented people who achieve emotional enjoyment from their personal contact with others. The adjectives used to describe the internist--nice, easy-going, understanding, gentle, popular, dedicated, interested, helpful, and devoted are similar to those of the GP'" (Coombs, 1978: 189).

It is beyond the scope of this study to determine why general internal medicine is chosen over general/family practice or vice versa. Prior to the designation of family practice as a specialty, one might guess that internal medicine was chosen by those who could afford (in terms of time and money) to spend an additional three years in training and who desired specialty status. However, now that family practice entails three years of postgraduate training and provides specialty status, the difference in motivation is less clear-cut. Only a small number of respondents interviewed chose general medicine (specifically,

general practice), and those who chose internal medicine all intended to practice general rather than subspecialty medicine. Although such a comparison must obviously be only suggestive, there are some notable similarities and differences.

As with those who chose general medicine, internal medicine was decided upon even before entering medical school for at least half of our interview respondents. One said, "I wanted to do medicine rather than anything else. That was early. That was even before medical school. I mean, it was during premed I decided I wanted to do medicine." For this group of early deciders, internal medicine was equated with "medicine," per se. "It's the backbone of medical education," said one respondent. One resident "crystallized" the decision to enter internal medicine during a third-year rotation which he found "exciting." "When I thought of medicine," he said, "I thought of internal medicine." One resident went so far as to say he "never thought about anything else," but he couldn't explain why: "I think from the day I decided to go to medical school I was convinced I was going into internal medicine."

Part of the appeal of internal medicine seems to be its breadth -- "It's more general." "It deals with a broader range of illness." One woman described it as "all-encompassing": ". . . it's the one thing that you get to stand back and integrate all the different systems interacting." One student, who is currently leaning toward internal medicine, feels that medicine generally is "not a happy profession" since you "deal with people at their weakest points." Internal medicine, she believes, can minimize this aspect of the profession because "it is broad enough so that you don't have to deal with just oncology

or chronic illness."

And, it deals with a diversity of patients as well. "The wide variety of ages," unlike pediatrics which "deals with children," was mentioned as an advantage. One physician felt that she "got along with adults better." Another felt that pediatrics, in fact, "was more complex than medicine because children are more complex" due to the additional variable of age." "They change so rapidly. You've got to always think in terms of age." The responsibility of taking care of children was seen as greater because they are "too fragile."

Others are more concerned with the "intellectual" challenge that such breadth can provide. The word "challenge" was frequently used. To stress this point, internal medicine was compared with other specialties, particularly obstetrics-gynecology. Obstetrics was "too limiting":

OB certainly can be intellectual, but it's really a quite narrow field. And there's just much more repetition. You deliver babies, give pelvic exams, you treat gynecological infections or malignancies and you do cesarian sections and you follow ladies while they are pregnant. So it's quite circumscribed, where medicine is much broader. [44]

Internal medicine, on the other hand, is "exciting," "academic," because of the nature of the work involved:

. . . seeing people, making diagnoses, talking about all the lists of different things, possible things that could go wrong and do go wrong and trying to fit it to a particular person. [18]

The common theme in these statements is "academic." To be intellectual, challenged, exciting--all fit the values of the academic medical center. It is in this sense that our subjects perceive internists to differ from general practitioners. One of the frustrations about general practice, as we have seen, was the limited knowledge of medicine, specifically among those who completed only one year

of postgraduate training. The more complex cases were referred to specialists. Hence, general/family practitioners concentrated on the more routine aspects of medicine. Students become aware of this as they progress through school, according to Coombs (1978). The perceived difference between the internist and the generalist becomes more apparent. The internist is seen to have better job opportunities, in terms of prestige, pay, hours and security. But most significant is that internists have more training, and consequently, their knowledge of the disease process is believed to be more extensive. "'For this reason," students say, "'the internist is much more astute and academically inclined than his GP colleagues'" (Coombs, 1978: 190).

Clearly among our own interviewees, the intellectual challenge of internal medicine also appealed to their previous academic and work experience. Overall, they were a highly motivated group. More than one-third of the internists had received graduate degrees prior to medical school; two had Ph.D.s (one in biology, one in psychology); one internist had two Master's degrees and a near Ph.D. Those without graduate degrees, for the most part, had been employed in medically related fields. One medical student, with two undergraduate degrees, saw internal medicine as a challenge: "I'll probably be attracted to medicine just because it's a challenge and I've always sort of opted for challenges. I've always shied away from compromise."

However, the "challenge" presented by internal medicine was not the same for all our respondents. One psychiatrist talked about why he wouldn't choose internal medicine:

My opinion toward hospital medicine is really pretty low because I've seen so much of it oriented toward keeping very sick old people alive--for very ambiguous reasons . . . almost as a game,

a challenge. How long can we string this person? And that I found hard to accept. [25]

Some respondents felt that this approach to medicine is related to an unfavorable attitude or personality among internists. They are "turned off by the people" who practice internal medicine, so much so that they ultimately choose other areas:

I was torn between internal medicine and pediatrics, but I found the pediatric service much more gratifying than the internal medicine service. There's just so much self-righteousness and hostility and anger on most medical services for me to be entirely comfortable. [28]

Another physician who chose surgery had initially considered internal medicine as "part of a logical place for someone who wants to be academic and research oriented and intellectual about medicine." And she was encouraged to pursue it by several internists who said to her, "Oh, of course you'll be an internist because it's natural." But eventually she realized otherwise:

Intellectually, I liked it a lot. . . . But there's an approach or attitude in practicing internal medicine which just didn't suit me. It's much more deliberative and argumentative and one-upmanship and reading tomorrow's New England Journal yesterday. [40]

For the most part, however, those with an early interest in internal medicine were not swayed by unfavorable experiences during medical school. They maintained a commitment to it.

Surgery

Surgery, like internal medicine, is typically a choice of younger rather than older matriculants (21 percent compared with 13 percent [Table 6]). While the proportion of physicians entering surgery between 1963 and 1972 has remained fairly stable (between 16 and 18 percent), there have been some shifts when age is taken into account. Among 1963 graduates, fully one-fourth of younger matriculants

became surgeons, compared with just over one-tenth of older matriculants. However, a decade later, the proportion of younger matriculants declined (to 15 percent from 25 percent) while the proportion of older matriculants increased slightly (to 15 percent from 12 percent), so that now the difference between the two age groups is negligible.

(Table 7) The shift in pattern fits the general trend away from general medicine into specialty medicine, particularly for older matriculants. This is further illustrated by the shift of physicians into internal medicine, as we have seen. This slight increase in surgeons occurs at a time when there is a body of opinion among public officials, supported by some excellent studies (see, for example, Fuchs, 1974), of an oversupply of surgeons (particularly general surgeons) in the physician population (Wechsler, 1976; see also, Scott, 1975; Fry, 1975; Moore, 1976).

While overall, surgery appears to be a choice of younger rather than older matriculants, it should be noted that when we distinguish between general surgery and subspecialty surgery, the pattern is less clear-cut. (Table 9)

Table 9

Surgery (General versus Subspecialty) as a Choice
by Age at Matriculation
(Physicians-in-Practice)

	<u>Younger</u>	<u>Older</u>
	<u>%</u>	<u>%</u>
General	6	5
Subspecialty	<u>15</u>	<u>8</u>
Total	21	13
(Number of persons)	(1169)	(1783)

The proportion of younger and older matriculants who enter general surgery is similar (6 percent and 5 percent, respectively), while nearly twice as many younger as older matriculants enter a subspecialty area (15 percent and 8 percent, respectively). Hence, it is really subspecialty surgery rather than general surgery that typically attracts younger matriculants.

The Appeal of Surgery

Educational training for certification in the surgical specialties (except for orthopedic surgery which is four years) is longer than for all other medical specialties. For instance, general surgery, neurological surgery, and urology each require five years; colon and rectal surgery and plastic surgery, six years; and thoracic surgery and cardiovascular surgery, seven years (Wechsler, 1976).

Those who commit themselves to surgery, despite the years involved, do so at some risk. Surgical training programs are selective and competitive, particularly those at the "prestigious hospitals," as described by Fry (1975). They operate on a "pyramidal system" in many cases in which a larger number of first-year applicants are accepted than are allowed to complete training. Each year, the less desirable candidates are weeded out. There is "fierce competition for the one or two spots available at the top of the residency pyramid" (p. 873). Those dropped must attempt to find other surgery programs, or choose other areas of medicine. Programs in many private or university hospitals do not operate on this basis, so they tend to be more highly selective in their initial acceptance of candidates since they take only as many residents as they expect to graduate.

Training to be a surgeon has been described negatively by some

of our respondents, both those who choose it and those who do not. Two who decided against it referred to it as "absurd as hell," and "much too long a haul for me." Yet, many are undaunted. For the medical school graduate who has pursued the normal path, graduated at age twenty-seven, it means postponing medical practice until perhaps the mid-thirties. For the older matriculant, this may mean a delay until the mid-forties. In fact, relatively few older matriculants choose surgery--13 percent compared with 21 percent of their younger classmates. On the other hand, what is surprising is that as many as 13 percent do choose it, given the demands of the training period. If time is a consideration for younger matriculants, then it is apt to be more so for older matriculants. One older recruit, who ultimately chose surgery after seriously considering internal medicine, was concerned about the time commitment. She refers to her decision as "real soul-searching because you make even more sacrifice to do surgery, general surgery, than you do to do medicine--timewise!" Even as a surgery resident, she admits, "You have to be really crazy to do general surgery. You have to be completely out of your mind."

Another resident, in his last year of general surgery training, had contemplated further specialization in cardiovascular surgery, but could not reconcile the additional three years.

A few who might have chosen surgery were deterred because of the length of training, often with some compromise. A psychiatrist, who liked surgery, said: "To this day, I wonder if I had been younger would I have gone into surgery." Another, also concerned about her age, "loved surgery" but "had to make a compromise":

I just kind of made a basic decision not to deal with surgery.

. . . I realize that I would have enjoyed surgery. I like working with my hands. I just plain like surgery. I would have liked it, but I could not have stood the five-year residency. [48]

For another, however, who chose a seven-year residency in plastic surgery, time was inconsequential--at least initially:

At this stage, you know, you were a doctor. You were doing something you wanted to do and you really didn't care. I really didn't think in terms of years. Certainly, I do now. But back then I didn't. [39]

It is not only the amount of time which becomes problematic, but the quality of time involved as well. The demands of a surgery residency are grueling in terms of the responsibilities, leaving little time or energy for a personal life. The same resident who has given up the idea of further training remarks on this:

. . . I have a family to think about and my time left from this program is minimal. I put in between one hundred and a hundred twenty hours a week and the rest of the time you have to try to get in the library a few hours. And the kids don't learn to love a father and that is bad, psychologically. So I think I better stop and just become a [general] surgeon. [31]

The nature of surgery training caused more than one of our respondents to choose other areas, despite an apparent attraction to surgery:

I did like surgery--especially plastics--but the way I saw surgeons work, which was even worse than the way I saw people in the medical profession work--how many nights they were on call--I wasn't wanting to put that much time into it.

Only one respondent, however, mentioned "age" as a special problem in this respect:

[Faculty] might ask you whether you can handle the workload. I think it's a miracle anyone does. I think it's a miracle patients survive, the way surgeons are trained. I've never seen a more exhausted group of people in my life--ever! [28]

The general consensus, then, is that surgery training is horrible regardless of who undertakes it--young or old.

The complaints about surgery are not limited to the training period, either. The perceived lifestyle of the surgeon also deterred a number of older matriculants. One medical student, who is leaning toward internal medicine as a career choice, said that "the hours of a surgeon are just insane. People I know who have gone into surgery have never had their own life at all." Another respondent, who spent as many years in postgraduate training as a surgeon by doing first a residency in psychiatry and then a fellowship in community medicine, was primarily concerned about the time commitment as a practitioner rather than as a resident:

I had strongly debated surgery but gave it up on account of the fact of the time pressures and the commitment. My father had spent his whole life working, you know, six days a week, twelve hours a day, and I wasn't going to do that. That's not why I went into medicine. You see, I perceived surgery incorrectly as something you could do twenty hours a week and do other things twenty hours a week. While that's possible, it's really not practical. [34]

The perceived time demands of a surgeon may be overestimated, however. If we look at the number of weeks practiced per year and the number of hours practiced per week for various specialties, surgery compares favorably with most others. And there has been little change in the last decade. In 1979, surgeons practiced an average of 46.7 weeks a year, as compared with 46.9 weeks for general practitioners and 46.7 for internists. All other specialties were similar, ranging from a low 46.5 for radiologists and psychiatrists to a high of 47.5 for obstetricians-gynecologists. In terms of hours per week, surgeons worked an average of 52.0 compared with 48.2 for general practitioners, and 52.2 for internists. Again, the range was fairly narrow, with a low of 45.5 for psychiatrists and a high of 52.2 for internists (Goldfarb, 1981). Perhaps compounding the image of long hours is the

women, two men) we interviewed, only one completed college directly after high school. This woman worked as a computer programmer on a full-time basis until her first child was born. She then worked on a part-time basis, free-lancing, while she cared for her second child as well. Another woman began college directly after high school, but quit within three years, in part because she chose to support her husband through law school and in part because she clearly lacked direction. She admitted that she entered college "without any clear idea of what to do afterward or what [she] was even doing there." It was six years before she returned to school to complete her undergraduate degree, eventually to pursue medicine. Incidentally, she never remarried.

The third woman, originally from England, became a secretary after high school because "it was quick," although she "hated it." After her marriage, she immediately had a child, followed by two others in rapid succession. During this time, she worked at "odd jobs" and "volunteer work." After a divorce and remarriage, she moved to the United States where she finally went to school to earn a nursing degree and then a medical degree. During that period, she divorced her second husband and is currently married to a surgeon.

The men were similarly late in crystallizing their career goals. One joined the Army after high school and considered making it his career. He explained, "I just wanted to get away and sort of find myself." Eventually he realized that he had "the potential to do better" than an Army career. He used the GI Bill to complete the college studies he began during his stay in the Army. The second man, from Ecuador, came to the United States after high school to help put his sister through school. He worked in a factory during the day,

quality of time involved in a surgical practice. It has been estimated that the number of operations a surgeon should perform to maintain his skill is five a week, averaging one hernia equivalent each (Welch, 1974).³ This means that a surgeon should expect to do nearly 240 operations a year. With teaching and/or administrative duties, this may be perceived as too much.

Those who choose and successfully complete surgical training are thus often thought to be a special breed. There is an "aura of magic and power" that surrounds the surgeon, perhaps more than any other specialist (Coombs, 1978: 190). Surgeons have been described as "headstrong," "individualistic," "decisive," and "self-assured" (Wechsler, 1976: 114). The older matriculants we interviewed seem, at once, both to fit and defy this profile. The very act of pursuing medicine at a late age, despite all the inherent obstacles, warrants the strength and determination typical of surgeons. Clearly, one must be headstrong, individualistic, decisive, and self-assured to pursue and succeed at such a remote goal. Yet the surgeons that we interviewed displayed none of these characteristics during their early adulthood, prior to their commitment to medicine. Thus they differ not only from the expected behavior of the surgeon, but from their colleagues in other specialties as well. As we have seen, older matriculants who chose either general medicine or internal medicine seemed to have had a rather straight and successful career path prior to medicine. All completed college at the appropriate age, were employed in various sectors and/or attended and completed graduate school. The surgeons, on the contrary, seemed to have drifted for a while before making a commitment to medicine. Of the five surgery residents (three

while he attended elementary school in the evening to learn English. After four years he began college, only to be drafted into the Army. It was three years before he could return to college.

The above description of our surgery respondents, though notably small in number, illustrates how different they are not only from the typical medical recruits who begin at a younger age, but from the other physicians who began at a later age, as well. For both men and women surgeons, lack of clear-cut goals due to external circumstances (primarily financial) and to personal indecision thwarted the straight career path noted among our other respondents (older matriculants not in surgery). Yet, in the final outcome, they opted for the specialty which is clearly contrary to what their previous history might predict.

In their choice of medicine, as a profession, and surgery, as a specialty, they do not behave in a way typical of surgeons. Although they decide fairly early--while in medical school--to choose surgery, the decision is often fraught with ambivalence. In fact, for most, surgery was never considered at the outset, while other fields were routinely contemplated. For instance, internal medicine was mentioned as a probable choice by one respondent, with surgery a deliberate omission. In fact, she postponed her surgery clerkship in medical school until "the very end" because she was "so sure [she] didn't want to do surgery." But, upon completing her clerkship in medicine, she realized that she had made a mistake. "Medicine is not for me," she said.

What is the appeal of surgery? For many, it is the emphasis on the "technical skill: involved. Surgery is "technically precise"; "it

requires the most manual dexterity."

Generally, surgeons are viewed as people who "like quick action and immediate results" (Coombs, 1978: 190). To contrast, internists are viewed as "oriented to the world of ideas"--"stronger in diagnosis than therapeutics" (Wechsler, 1976: 111; 117). According to one of our respondents, who would least like to enter surgery, it is "technically exacting but not very intellectually stimulating." This dichotomy is wittily expressed by another respondent, who chose environmental medicine as her field:

Surgery is just too hospital-based and too narrow a field. The prejudice, of course, on the part of pediatricians and internists is that surgeons see a problem and want to cut it out. Surgeons will argue that pediatricians and internists, by the time they make up their mind, the patient is dead. [28]

As diverse as the two approaches might seem, they are not mutually exclusive according to one surgery resident:

I am still torn between [medicine and surgery] sometimes, because medicine is much more methodical. But, it seemed to me that if you could be smart and think well, which is the thing that medicine people think surgeons don't do--but good surgeons can do it--and be active and do something--it really was a nice combination. [11]

The ability "to do something"--that "people get better"--is a particularly attractive feature of surgery as compared with medicine:

. . . when I thought about medicine, a lot of medicine is helping people cope with problems you can't solve. A lot of it is treating chronic disease, and even though I didn't like to admit this at first, I just don't have that temperament at all. In surgery, a lot of the things you do are very simple. You take out somebody's appendix. It's a real simple thing to do but they feel better and they get better, and a couple of days later they go home. At least you did something concrete about it. So I liked that better. [11]

For another surgeon, it is not only "being able to operate," that is satisfying, but participating in the "preop" and "postop" phases as well:

. . . to take a very sick patient, operate on him, and maintain him alive afterwards is very challenging. To take an already decompensated patient and then to decompensate them more with anesthesia and the stress of surgery and to bring them out of all that decompensation afterwards is a tremendous challenge. [31]

Along with the ability to "take action" is the generally "unquestioned authority" that goes with it (Coombs, 1978: 190). The desire for authority, or "power, if you will," as put by one respondent, is part of the appeal of surgery. For this woman, "surgery was the epitome of what she wanted from medicine--"to be in charge of a patient." This is in marked contrast to her previous experience as a nurse. "As a nurse in this country you suggest--and you have to be careful how you suggest," she explained. "With surgical training," she remarked, "I can do anything. I will have the confidence and training to do anything that comes across my path."

The feeling of confidence, for this woman, grew out of her surgical training. For another, a man, confidence seemed to have been instrumental in his choice of surgery in the first place. Basically, he felt "confident" that "no matter what field" he chose, he "could do well." He chose surgery above all others because of its emphasis on "procedures" and "doing things with [his] hands." In contrast, the only field he couldn't handle was psychiatry. "To get a history and physical from a catatonic, if he's not saying anything, I was lost."

This respondent hints at but does not fully articulate one of the major criticisms of the surgeon, that is, the lack of concern or lack of ability to deal interpersonally with patients (Wechsler, 1976; Coombs, 1978). Trying to deal with a catatonic patient may represent the ultimate demand on one's interpersonal skills, but psychiatry, even in its more routine cases, depends on such ability. Surgery, with its

emphasis on the acquisition of technical skill, presents a danger that this might result in neglect of the "non-mechanical, or specifically human considerations" (Hollender, 1958: 117). Often, this lack of interpersonal contact was mentioned as a reason for not choosing surgery. For instance, a physician who chose psychiatry said: "The people I have known in surgery were probably the least sensitive people in any part of medicine. I just couldn't see myself identified with that."

The relationship between the surgeon and the patient is a classic example of "activity-passivity" (Szasz-Hollender, 1956). The physician determines what is best for the patient and does it. In the operating room, it is easy to interact with the patient as an object, that is, as an anatomical-organic problem. The patient, under anesthesia, is totally passive. The danger is that this behavior on the part of the physician may be carried over to the preoperative and post-operative phase of treatment. This is pointed out by Wilson (1968) in a presentation to surgeons:

In the world outside the operating room, the surgeon strikes me as being, for entirely understandable reasons, much less assured and adept. His training has prepared him for the exquisitely skilled tasks of surgery itself, but has probably equipped him little, if at all, for the no less exquisite human relations skills involved in preparing the patient for an operation and counseling him once it is done. (p. 111)

Surgeons have been described as "thick-skinned," "authoritarian," "not particularly concerned with establishing warm and friendly relations with patients." They are seen to have the "least interest in interpersonal aspects of patient care," and to "not value rapport with patients." (See, Wechsler, 1976: 108-109 for a summary of studies dealing with the personality of the surgeon.)

The older matriculants we interviewed seem to contradict these stereotypes in some ways. Not only do they deal effectively with patients, but often they have chosen surgery precisely as a means of doing so. One respondent, who had expressed an interest in radiology while in medical school because she was "intrigued by the interpretation of X-rays" could not bring herself to become a radiologist because "you are not directly taking care of patients." She chose orthopedic surgery instead because, she said, "I like dealing with them directly."

Often, the notion that surgeons lack and/or avoid interpersonal relations comes from the relatively short-term, episodic involvement between the surgeon and the patient. One respondent who preferred internal medicine mentioned this: "You don't deal with patients that much except for them to come in and find out about getting a hip replaced or whatever. I really enjoy very much working with people." But some older matriculants have shown that the length of involvement may be less significant than the quality of involvement. In this sense, their ability to deal with patients is paramount. One woman talked about how "idealistic" she was, and still is, in her decision to become a surgeon. She thought it would be "nice for people who do not have the traditional surgical temperament to do surgery."

. . . One of the things that is nice to do for people is help them through a crisis time that you are so used to. It's not a crisis for me when somebody's gall bladder comes out, but it is a crisis for them. I like to have time to talk with my patients and spend time with them. I like to do that. [11]

Interestingly, the respondent who perhaps best describes this attitude is the one (described earlier) who felt he could not deal with psychiatry, using the "catatonic patient" to illustrate his ambivalence. Yet this person adds a special dimension to his work as a plastic

surgeon because of his concern for the patient as a person rather than as a clinical problem. In his training he had done all kinds of surgery, such as "operating on hearts"; "it's all exciting" because "it's a life and death situation in your hands." But he suggests that the rewards of plastic surgery are different, and perhaps greater, despite the fact that he will miss "the pressure" which is part of other surgical areas. The following anecdote typifies his feelings:

. . . there was a young girl. She was thirteen years old, born with what we call micrognathia. She had an underdeveloped chin, and as she developed, the chin didn't develop with her face, so she looked like a rabbit. This poor girl was subjected to ridicule. . . . We operated on this little girl, and we completely fixed her deformities. . . . And to see the look on this girl's face, to know what a tremendous psychological impact this was going to be for her, that she can just go out and be accepted, not as a freak but as a human being. When I saw her look in the mirror, it was just fantastic. [39]

He elaborated further on the "psycho-social" aspects of plastic surgery:

You have to understand that, yes, deformities, congenital deformities or traumatic deformities--all these things weigh differently with different people. A little scar may not matter to me, but it may be tremendously traumatic for another person. For this reason, if I can help at all, I can beautify, correct, fix, then I feel that what I am doing is justified.

General Practice, Internal Medicine, and Surgery: Discussion

Overall, approximately one-half of all physicians nationally may be found in three areas of medicine: general practice (including family practice), internal medicine, and surgery. This is true of younger matriculants as well as older matriculants. But the distribution within these areas clearly differs when age is taken into account. Forty-two percent of younger matriculants choose internal medicine or surgery, while only 26 percent of older matriculants do so. (See Table

7) Or, we may say that older matriculants are nearly three times as likely as younger matriculants to choose general practice (24 percent to 9 percent). Thus, it appears that older matriculants are less oriented to specialty practice. Even within their choice of general medicine (general practice and family practice), they opt for the "non-specialty" of general practice rather than the "new specialty" of family practice. Further, when a specialty such as internal medicine is chosen, they opt for "general" internal medicine rather than one of the subspecialties; such is also the case with surgery. When there is a choice, it seems, older matriculants choose the most general approach to medicine. And, for the most part (as we will see), this does not seem to be associated with the type of medical education they receive, as one might suspect.

One way in which age does influence specialty choice is in terms of the length of postgraduate training. To be a general practitioner, or a general internist or a general surgeon, requires fewer years than to subspecialize. Yet, from our discussions with older recruits, this factor, as well, does not receive as much attention as one might expect.

Other factors must be operating. Throughout the interviewing process, it became increasingly clear that older matriculants are concerned, and often consumed, with the issue of health care delivery in contemporary society. Many see medicine as a means of effecting social change. They have demonstrated this commitment in their previous careers, both academic and work. They were nurses, counselors, social workers, psychologists, and teachers. What these occupations have in common is a focus on interpersonal relationships and service. What does

this have to do with their orientation to general rather than specialty medicine? Perhaps general medicine allows for a more direct, on-going relationship with the patient. This is particularly true in the case of general internal medicine, which, as we have seen, has taken on many of the characteristics of general practice in its emphasis on primary care. This explanation is raised as a possibility, and by no means the only one. Since it was not known at the outset of this research that older matriculants would lean so heavily toward general medicine, we did not probe in our interviews for possible reasons. And, perhaps, as our analysis unfolds, additional factors will be discovered.

While there is a tendency for older matriculants to choose general rather than specialty practice, we must also consider that older matriculants are found in areas other than general practice. If we exclude general/family practice from our analysis for the moment, the great majority of both younger and older matriculants specialize; 91 percent of younger matriculants and 76 percent of older matriculants. Age at matriculation, then, is not necessarily a deterrent to specialize.

Other Specialties: Psychiatry as a Selected Case

General/family practice, internal medicine, and surgery account for approximately one-half of all physicians in the population. The rest are distributed primarily among pediatrics, psychiatry, radiology, obstetrics-gynecology, and "other" (see note a, Table 4). Since psychiatrists are the largest single category of interview respondents, we will focus on that specialty as a case example of an area which attracts both younger and older matriculants.

Psychiatrists have been shown to have certain characteristics when compared with other physicians. They tend to value "altruistic love of people" and "humanitarianism"; to "place great emphasis on interpersonal relationships"; to be strongly "patient-oriented"; to be more concerned with the interpersonal aspects of patient care than with diagnosis and treatment (Wechsler, 1976: 110).

In our interviews with residents in psychiatry, the qualities described above were clearly evident, both in the psychiatrists' attitudes toward the profession in general and the specialty in particular. These qualities are reminiscent of those displayed by physicians choosing general practice or family practice. Hence, it is not surprising that half of those we talked with seriously considered family practice as a career choice prior to making a commitment to psychiatry. One psychiatrist, who had been in practice more than ten years and who currently heads a residency training program in psychiatry, talked about the overlap between the two fields:

The emergence of family practice as a specialty is one of the reasons psychiatry is suffering right now. Family practice is draining a lot of people who saw psychiatry as the last humanistic oriented specialty. Now they have the option of practicing psychiatry in family practice. [41]

In fact, he admits that he, too, would have chosen family practice rather than psychiatry had it been an option when he graduated in the early sixties.

Those who did not consider family practice as an alternative considered one or more other areas of medicine before committing themselves to psychiatry. Most psychiatrists did not choose psychiatry until late in medical school or during an internship year. Yet, it is interesting that the very quality which drew them to psychiatry in the

end--the emphasis on interpersonal relationships with patients--was the quality which played a part in their consideration of other areas, as well. And this concern was apparent even prior to pursuing medicine, most notably in their previous career paths. Among our respondents in psychiatry were a former social worker, a teacher, and a nurse. There was a deliberate attempt to rule out any area of medicine that did not involve "intimate patient contact (e.g., radiology, anesthesiology, pathology) or even surgery, because "patients were anesthetized all the time." One respondent thought specifically of pediatrics or internal medicine:

. . . all of them are people-oriented specialties, clearly people-oriented. And that was clear to me probably before medical school. So I wasn't going to become a researcher, or a pathologist, or a radiologist, which are more technical and less people-oriented.
[33]

This emphasis on interpersonal relationships was not limited to the doctor-patient relationship; colleague relations were important, too:

[Psychiatry] wasn't cutthroat. People weren't out to cut each other down. That wasn't the purpose of things. People really tried to work together. [46]

Not only did we see a pattern of physicians considering other specialties prior to psychiatry, but also a hint of resistance to psychiatry as a choice. Only after much deliberation could our respondents admit that, in a sense, psychiatry exemplified all that was important to them personally and professionally. One respondent said he "never really felt seriously" that he would go into psychiatry. "That was just something I like to do. I had always kind of played a counselor role with many of my friends, analysing their lives or my own life, or whatever. . . . I had an Ann Landers side to me." Only after applying to programs in both psychiatry and family practice did this

individual decide on psychiatry.

A former nurse said, emphatically, "When I started medical school I wasn't going to do psychiatry." Rather, she wanted an area in which she could effect some social change, particularly with the poor. Pediatrics, she felt, was more relevant, but not to her liking after a clerkship. She thought about obstetrics-gynecology, as well. To her surprise, while doing some part-time nursing in a psychiatric ward (while in medical school), she realized she "always felt comfortable in psychiatry."

A former social worker and "an honors student in psychology" thought that psychiatry "seemed like a natural" for him; yet, even he could not crystallize his career plans until after completing a "classical" rotating internship: "I started to clarify some of my career choices in medical school, and psychiatry as an obvious choice. But I was trying to maintain an open mind."

What accounts for this initial resistance to psychiatry and the late commitment to it? Clearly, among all those who ultimately chose it, was the desire for maximum patient contact. Yet, there was also an awareness of the perceived, or real, limitations of psychiatry as a field within medicine. There is a conflict inherent in psychiatry which one respondent referred to as the "pragmatic versus the abstract." Compared with other specialties, psychiatry is "much more ambiguous":

So, there was this side of me that really liked the ambiguity and challenge and the realization that there was nothing more difficult than psychiatry. And the part of me that was the engineering part which liked the idea of being able to go and fix people up and see the results in two hours or whatever. Even in two weeks as opposed to twenty years. [25]

Psychiatry is most typically contrasted with surgery (Wechsler, 1976).

Unlike the surgeon who witnesses almost immediate results after the removal of a diseased organ, for example, the psychiatrist rarely sees dramatic or immediate results. And the very nature of the doctor-patient relationship is affected by this. Interaction with psychiatric patients, unlike surgical patients, most often extends over considerable time (Coombs, 1978). This element of "delayed gratification" and the absence of the "laying on of the hands" was particularly frustrating to a former biochemist, who left basic research for that very reason. However, she began to realize that although at times frustrating, the "gratification" in psychiatry "comes from seeing the person all the time, and from that interchange" even though the result is not apparent right away. She makes an analogy between surgery and psychiatry which makes one realize that perhaps psychiatry is not so far removed from the rest of medicine:

[Surgery] is very probing. In order to find something out you have to go in there and hurt, right? . . . If you have an abscess, you go in and cut it out and it would all come out. But it's not without pain. And then it heals. In psychiatry, there is the same thing. It's a very probing type of--intrusive type of instrumentation, as opposed to even internal medicine, where you're not as invasive. Here, we are invading the mind, really, with different things. With words as opposed to scalpels. That's how I see it. [47]

Related to these issues is a critical one, found not only within the profession but among the lay population as well. That is, the psychiatrist is perceived "as not really a doctor." As one resident put it, the "M.D. attached to my name is just a ruse." But there is also the opinion among our respondents that psychiatrists, like all physicians, need a command of the medical knowledge if they are to be "good psychiatrists." One psychiatrist completed a full year of internal medicine, which she described as "brutal" before beginning her

psychiatric training. "If I was an M.D. I wanted to make sure I know what to do with somebody who was actually very sick. To have my M.D. appended to me and not know what was going on?!"

As far as one psychiatrist is concerned, ". . . a good psychiatrist practices medicine. At least, if not literally, at least in terms of his thinking and attitude toward the patient." For example, he describes how he viewed an individual both "medically and psychiatrically":

Are your eyes a little prominent? It may be a sign of hypothyroidism. It may be contributing to the anxiety level that you came to me as a psychiatrist for. Is your throat a little full, perhaps suggestive of a goiter? Are you unusually thin? Your hair? Is there some metabolic disorder? I am constantly scanning the psychiatric patient for signs where there may be an interface between emotional difficulties and physical difficulties. That's what makes psychiatry unique. . . . Psychiatry has no monopoly on psychotherapy per se. Well-trained social workers, clinical psychologists can do that. What we do have a monopoly on is the interface between the physical and the emotional. [41]

One respondent carried this aspect to its extreme by creating a "trial residency"--a "new kind of residency" in obstetrics-gynecology and psychiatry with board certification in both areas.⁴ The goal was "psychosomatic gynecology," which involves such areas as sex education, postpartum depression, genetic counseling and other "extremely traumatic times in women's lives" (also, for example, menopause, hysterectomies, mastectomies). These are issues which do not necessarily require "prolonged therapy" but rather "crisis intervention" to get these women through the bad times, she explained.

Medical Education: Contribution to Specialty Choice

While it is likely that the aspiring physician has some idea about the kind of work physicians do before entering medical school, it

is also reasonable to assume that his knowledge regarding all the various career options within medicine is more limited (Mechanic, 1978). For the most part, medical recruits make their final decisions regarding specialty choice toward the end of the four years of training, after they have sampled the various fields in their clerkships. Yet it is possible, given one's background, to enter medical school with a propensity toward a particular career goal. This was most apparent in the case of general practitioners, but occasionally applied to internists, surgeons, and others as well. This may reveal itself prior to entering medical school in terms of a definite commitment to one field, or it may emerge more subtly as the four years progress.

We must also consider the impact of the medical school environment itself on these career decisions. That medical schools have distinctive environments has been documented in a number of sociological studies, most notably Becker et al (1961), Merton et al (1957), and Bloom (1973). And, that schools both selectively recruit and differentially affect students is also apparent. By examining the nature of medical education, we may further speculate on the process of specialty choice. The particular characteristics we will examine are: location (foreign or United States); type of control (public or private); and quality (high or low). We have already seen that younger and older matriculants differ in the type of education they receive. And they differ, too, in their specialty choices. But to what extent does education have a bearing on specialty choice, if at all?

Quality of School

It has been suggested that the more "elite" schools tend to

produce physicians interested in specialty practice and/or teaching and research rather than patient care (Krause, 1971; Marshall, 1978; see also, Miller, 1970, for a study of training for the medical elite). Our data are inconclusive for such hypotheses (Table 10).

Table 10
Specialty by Quality^b of Medical School
Attended (United States)

	<u>High</u> %	<u>Low</u> %
General/Family Practice	15	19
Internal Medicine	23	15
Surgery	18	17
Other ^a	<u>44</u>	<u>49</u>
Total	100	100
(Number of persons)	(998)	(1308)

^a

See note a, Table 5.

^bSee note b, Table 2.

For general/family practitioners, quality of school attended appears to have little bearing on career choice. Those who attended low quality schools were only slightly more likely than those who attended high quality schools to become general practitioners (19 percent to 15 percent). Thus, 81 percent of the remaining specialists (internists, surgeons, and others) attended low quality schools while not many more, 85 percent, attended high quality schools. Only among internists is there any notable difference, and even this is not dramatic; twenty-three percent of internists attended high quality schools compared with 15 percent who attended low quality schools.

When we introduce age at matriculation to this analysis, the pattern is basically unchanged. (Table 11)

Table 11

Specialty by Quality of Medical School Attended
(United States) and Age at Matriculation

	<u>Younger</u>		<u>Older</u>	
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
	%	%	%	%
General/Family Practice	9	10	21	25
Internal Medicine	29	21	17	12
Surgery	23	20	14	15
Other ^a	<u>39</u>	<u>49</u>	<u>48</u>	<u>48</u>
Total	100	100	100	100
(Number of persons)	(528)	(499)	(470)	(810)

^aSee note a, Table 5.

Quality of education makes little difference in choice of general/family practice; age at matriculation appears to be the discriminating factor. Among younger matriculants, similar proportions of physicians attended low and high quality schools (9 percent and 10 percent, respectively). Among older matriculants, again, the proportions were similar; 21 percent attended high quality schools, while 25 percent attended low quality schools. Older matriculants--regardless of quality of education received--were more than twice as likely as younger matriculants to be general/family practitioners.

Quality of education is associated with specialty choice only among internists, and even then, primarily among younger matriculants. Here, 29 percent of younger matriculants who attended high quality schools compared with 21 percent who attended low quality schools choose internal medicine. Among older matriculants, the difference

between those who attended high and low quality schools is somewhat smaller, 17 percent and 12 percent, respectively. Age at matriculation, again, appears to have the most impact on career choice. Regardless of quality of school attended, younger matriculants more often than older matriculants become internists. Among those who attended high quality schools, 29 percent of younger matriculants compared with 17 percent of older matriculants became internists. Among those who attended low quality schools, 21 percent of younger matriculants compared with 12 percent of older matriculants became internists--nearly twice as many.

For surgeons, quality of education makes virtually no difference. Similar proportions of younger matriculants become surgeons, regardless of the quality of school attended (23 percent attended high quality schools and 20 percent attended low quality schools). And similar proportions of older matriculants become surgeons, regardless of their education (14 percent attended high quality schools and 15 percent attended low quality schools).

Again, age has the most impact on specialty choice, although less so among surgeons than among internists or general practitioners. Overall, younger matriculants choose surgery more often than older matriculants, even when quality of the school is the same. Among those who attended high quality schools, 23 percent were younger and 14 percent were older; among those who attended low quality schools, 20 percent were younger and 15 percent were older.

Generally, neither quality of education nor age at matriculation has much bearing on specialty choice for the remaining specialty areas designated "other."

To summarize, then, when quality of education is examined in relation to specialty choice, it appears to have little significance. When age at matriculation is introduced, however, we see that age rather than quality is the more relevant variable. Regardless of quality of education received, older matriculants are less likely than younger matriculants to specialize.

Location

Overall, location of school does not make a substantial difference when specialty choice is considered. (Table 12)

Table 12

Specialty by Location of Medical School Attended

	<u>Foreign</u>	<u>United States</u>
	%	%
General/Family Practice	23	17
Internal Medicine	16	19
Surgery	10	17
Other ^a	<u>51</u>	<u>47</u>
Total	100	100
(Number of persons)	(525)	(2411)

^aSee note a, Table 5.

General/family practitioners are more often graduates of foreign than United States schools (23 percent compared with 17 percent), but the difference is small. In other words, specialists (internists, surgeons, others) are more likely to have graduated from United States rather than from foreign schools (83 percent compared with 77 percent). It is among surgeons that location seems to have its biggest impact. Ten percent of surgeons attended foreign schools while 17 percent

attended United States schools, again, a notable, but not striking difference.

When age as well as location is considered, location alone no longer distinguishes between general practitioners and specialists. (Table 13) In the previous analysis, we saw that foreign graduates rather than United States graduates were likely to opt for general/family practice (23 percent to 17 percent). However, when we control for age at matriculation, this difference disappears. Among younger matriculants, similar proportions of foreign and United States graduates become general/family practitioners (11 percent and 9 percent, respectively). Among older matriculants, again, similar proportions of foreign and United States graduates become general/family practitioners (26 percent and 24 percent). Age is clearly the discriminating factor in specialty choice. Regardless of location of school, older rather than younger matriculants opt for general practice--more than two to one.

Table 13

Specialty Choice by Location of School Attended
and Age at Matriculation

	<u>Younger</u>		<u>Older</u>	
	<u>Foreign</u>	<u>U.S.</u>	<u>Foreign</u>	<u>U.S.</u>
	%	%	%	%
General/Family Practice	11	9	29	24
Internal Medicine	27	25	13	13
Surgery	11	21	10	15
Other ^a	<u>51</u>	<u>46</u>	<u>51</u>	<u>48</u>
Total	100	100	100	100
(Number of persons)	(98)	(1063)	(427)	(1348)

^aSee note a, Table 5.

A similar pattern is evident among internists, except in this case it is the reverse. Regardless of location of school, younger matriculants rather than older matriculants choose to specialize in internal medicine--two to one.

Among surgeons, our original finding holds true. Surgeons are more likely to have attended United States schools, but this is particularly so among younger matriculants, where nearly twice as many United States as foreign graduates become surgeons. Among older matriculants, United States graduates lean toward surgery more often than foreign graduates (15 percent to 10 percent), but to a lesser degree.

Age appears to be relevant only among United States graduates. Only one-tenth of foreign graduates, regardless of age at matriculation, become surgeons; for United States graduates, younger matriculants have a slight advantage over older matriculants (21 percent to 15 percent). Clearly, the most "typical" medical recruit--the one who matriculates at the appropriate age and attends a United States school --has the best chance of becoming a surgeon.

For the remaining specialties, little can be said. Neither age nor location makes much difference.

In sum, age at matriculation, rather than location of medical school, is associated with specialty choice in most cases. Surgery is the exception, in which both variables play a part.

Type of Control of Medical School (United States)

Type of control (public or private) of medical school shows some association with career choice when general/family practice and specialty practice are compared. (Table 14) General practitioners

Table 14

Specialty by Type of Control
of U.S. Medical School Attended

	<u>Public</u>	<u>Private</u>
	<u>%</u>	<u>%</u>
General/Family Practice	22	11
Internal Medicine	17	21
Surgery	16	20
Other ^a	<u>45</u>	<u>48</u>
Total	100	100
(Number of persons)	(1301)	(1003)

^aSee note a, Table 5.

tend to graduate from public rather than private schools (22 percent to 11 percent); specialists (internists, surgeons, others) more often attended private schools (89 percent to 78 percent). It is general/family practice per se which accounts for most of this difference. Twice as many general/family practitioners attended public schools as private schools, whereas among the remaining areas, separately examined there is only a slight tendency for surgeons and internists and others to attend private rather than public schools.

With the introduction of age at matriculation to the above analysis, the same pattern holds. (Table 15) Among both younger and older matriculants, general practitioners more often attended public rather than private schools. Among younger matriculants, the difference remains two to one (12 percent, public, to 6 percent, private). Among older matriculants, the difference is slightly less (29 percent, public, to 16 percent, private).

Age at matriculation also has a bearing on specialty choice, however.

Table 15

Specialty by Type of Control of U.S. Medical School
Attended and Age at Matriculation

	Younger		Older	
	Public	Private	Public	Private
	%	%	%	%
General/Family Practice	12	6	29	16
Internal Medicine	24	26	12	16
Surgery	19	25	14	17
Other ^a	<u>45</u>	<u>43</u>	<u>45</u>	<u>51</u>
Total	100	100	100	100
(Number of persons)	(562)	(463)	(739)	(822)

^aSee note a, Table 5.

Regardless of the type of school attended, older matriculants opt for general practice and younger matriculants, specialty practice. More specifically, when graduates of public schools are compared by age, older matriculants outnumber younger matriculants more than two to one (29 percent to 12 percent) in their choice of general/family practice. Similarly, when private school graduates are compared by age, older matriculants outnumber younger matriculants more than two to one (16 percent to 6 percent).

When internal medicine and surgery, as well as the other specialties are considered, there are few differences when type of control is examined. Among younger and older matriculants, similar proportions of physicians attended public and private schools. The most notable difference, though not striking, occurs in surgery where younger matriculants who attend private schools are the most likely to become

surgeons--fully one-fourth. When type of control is examined, it appears that age as well as control relates to specialty choice, particularly when general/family practice versus all other specialties are compared.

Medical Education and Specialty Choice: Discussion

Overall, when each medical school characteristic is considered --quality, location, type of control--age at matriculation, rather than type of school, seems to be the factor which most relates to specialty choice. Typically, older rather than younger matriculants opt for general/family practice rather than the specialties. But choice of one of the specialties in particular, surgery, seems to be influenced by both age at matriculation and type of school. Younger matriculants who attend high quality schools are the most likely to become surgeons, just under one-third. Location is also important, more so for younger than older matriculants. Fully one-fifth of younger matriculants who attended United States schools become surgeons. And finally, though to a lesser degree, type of control is also relevant, more so for younger than older matriculants. Fully one-fourth of younger matriculants who attend private schools become surgeons.

Although older matriculants more often choose general/family practice rather than specialty practice, there are substantial numbers of older matriculants who do specialize. Those who do have not been affected by the nature of their undergraduate education. While we have seen that older matriculants generally tend to graduate from foreign, low quality, or public schools more often than younger matriculants, this has little or no bearing on their later career patterns. That is,

if we are to place a value judgement on education and say that foreign, low quality, or public schools are "not as good" as their counterparts, then clearly older matriculants are not disadvantaged because of their education in their pursuit of the more prestigious specialties of internal medicine and surgery as opposed to general practice.

Notes

¹Noren et al (1980) compared the style of practice of internists and general/family practitioners. Overall, they found that general/family practitioners spent less time examining patients and ordered fewer laboratory and X-ray studies in their capacity as primary care physicians. (See also, Aiken et al [1979] on specialists as primary care physicians.)

²At the present time, nearly 70 percent of internal medicine residents continue with one to three years of subspecialty training (Lee and LeRoy, 1976).

³The term "hernia equivalent" was coined as an index of the volume and complexity of operative experience, as described in Spencer, 1974.

Chapter 7

Type of Practice

Selecting and establishing a medical practice, along with the choice of becoming a generalist or specialist, are two elements of a physician's work setting which characterize his career. The nature of one's practice varies by geographic location (urban/rural; physician density); primary activity (direct patient care or teaching, research, and/or administration); and practice arrangement (solo, group affiliation, or organization).

Our focus here, as throughout the research, will be the influence of age at matriculation to medical school on practice patterns. We have seen (Chapter 6) that age is in some ways associated with one component of a medical career--specialty choice. To what extent, then, does age have a bearing on the location, arrangement, and activity of medical practice?

Geographic Location

The factors which influence where a physician will locate his practice have received increasing attention due to concerns about the supply and distribution of physicians, in recent years. The numbers of physicians have increased steadily, from approximately 120,000 at the turn of the century to more than 400,000 today (Roback, 1974; Wunderman, 1979). Yet, locating these physicians where they are needed geographically remains a problem (Lee et al, 1976). It is generally agreed

that ". . . producing more physicians would not necessarily guarantee that they would be distributed in a more equitable fashion geographically" (Wolinsky, 1980:286).

A number of indicators have been used to describe the distribution of physicians, two of the most popular pertaining to population characteristics (urban/rural) and physician characteristics (rate of physicians per 100,000 population). Our AMA data, alone, did not allow us to examine the issue of physician location other than to indicate variations by state or county of residence, that is, the number of physicians in each state or county. In order to describe these counties by urban/rural differences, or physician density, we supplemented our AMA file with data from the United States census (County and City Census Data, 1977). Each county in the United States was coded for the percent of the population that was urban and for the rate of physicians per 100,000 population (as enumerated in the census data).¹ This separate set of data were merged with the existing AMA data. Counties could now be described as those ranging from 0 percent urban to 100 percent urban; and from 0 physicians per 100,000 population to 846 physicians per 100,000 population. The physician respondents were then distributed according to the type of county in which they lived (and, most often, practiced as well).

Overall, it appears that age at matriculation to medical school, per se, has virtually no bearing on geographic location of practice. The rather significant factor appears to be whether one is a specialist or generalist. Typically, all physicians are attracted to locations with greater access to cultural, recreational, and educational resources (Wolinsky, 1980). Specialists, as a subgroup, are particularly

concerned about the quality of the medical environment--the availability and accessibility of medical schools, teaching hospitals, or large, well-equipped and well-staffed community hospitals (McFarland, 1973; Lee et al, 1976). Such locations are likely to be urban or suburban, and to have a high concentration of physicians.

Our combined AMA and census data support this pattern. When generalists (general/family practitioners) are compared with all specialists, regardless of age at matriculation, they are likely to practice in predominantly rural areas (where at least 66 percent of the population is rural) twice as often as specialists (14 percent to 7 percent); and they are likely to be found in lower physician density areas (where there are fewer than 63 physicians per 100,000 population), more than four times as often (13 percent to 3 percent). The addition of age at matriculation to the analysis does not alter the findings. Both younger and older matriculants have similar practice characteristics when specialty and location are concerned.

Practice Arrangement

The majority of physicians in our sample, fully nine out of ten, are engaged primarily in the direct care of patients rather than in teaching, administrative, and/or research activities. This is true for both younger and older matriculants. Physicians do vary, however, in the way in which they practice medicine in terms of whether they practice alone or with colleagues; in a private office, office complex, or large organization; or on a fee-for-service or salaried basis.

The AMA specifies nine practice arrangements (see, Goodman, 1977), which we have grouped into three broad categories.²

- Solo Practice, in which a physician is self-employed and practices alone in an office which he equips and maintains with his own capital. While he may share office facilities and space with one or more physicians, he does not share patients or income.
- Affiliation with other physicians includes three more specific arrangements: (1) Partnership, in which two physicians are self-employed, in a patient care setting which is cooperatively owned and managed; (2) Group practice, which is similar to a partnership except that it includes more than two physicians (though typically not more than four); (3) Arrangement (non-group), in which a physician is salaried by one or more physicians, as opposed to being a member of a partnership or group.
- Organizational practice, in which a physician works on a salaried basis, in a hospital (city, state or federal) or medical school, government agency (city, state or federal), corporation, union, etc. Compared with other practice arrangements, which primarily or solely involve direct patient care, organizational practices may include full-time or part-time teaching, administrative, and/or research activities (notably in a medical school or teaching hospital).

Current Distribution of Physicians (AMA)

Overall, the AMA sample is fairly evenly distributed among the three types of practice arrangement (Table 16), with approximately one-third of respondents in each.

Table 16

Practice Arrangement (Physicians-in-Practice)		<u>Percent</u>
Solo practice		30
Affiliation (Total)		(33)
Partnership		9
Arrangement		5
Group practice		19
Organization (Total)		(37)
Medical school		7
Hospital (non-government)		17
Government (hospital/agency)		11
Other ^a		<u>2</u>
Total		100
(Number of persons)		(2267)

^aFor example, insurance and pharmaceutical companies, and corporations.

Solo practice has historically been the predominant mode in the United States and has been referred to as the "stereotype" of medical practice (Freidson, 1979:299). The potential for "autonomy" and "independence" are believed to be the central features of this type of practice, as further described by Freidson (1961:33-34):

If [the solo practitioner] does not need the facilities of an accredited hospital, he is free to do whatever falls under the vague 'rubric' medicine. Furthermore, he may choose to work in complete isolation from his colleagues, entirely escaping their observation He may refer his patients for special services to any colleague he sees fit, on the basis of his own judgement. Within very broad limits, he is answerable to nothing but his own judgement and that of his patients. If patient demand exceeds doctor supply, he may not even be answerable to his patients.

Within the last fifty years or so, however, heightened in more recent years, the nature of the medical profession has changed, affecting the type of medical practice we (will) see in the United States. Generally, it is becoming less practical for a physician to practice alone, as typified by the solo practitioner. Organizational based practices, and to a less degree, affiliation in small groups, have become more popular alternatives. Table 17 examines these trends since 1963.

Table 17
Practice Arrangement, 1963 - 1972
(Physicians-in-Practice)

	<u>1963</u>	<u>1968</u>	<u>1970</u>	<u>1972</u>
	%	%	%	%
Solo	42	32	26	22
Affiliation	36	38	34	36
Organization	<u>22</u>	<u>30</u>	<u>40</u>	<u>42</u>
Total	100	100	100	100
(Number of persons)	(753)	(481)	(404)	(384)

What we see is a complete reversal in the popularity of solo practice and organizational practice, between 1963 and 1972. Whereas 42 percent of 1963 graduates are in solo practice, the proportion has decreased, by almost half, to 22 percent of 1972 graduates. Conversely, the proportion of 1963 graduates in organizational settings, 22 percent, has nearly doubled, reaching 42 percent of 1972 graduates.

Affiliation as a general category has remained remarkably constant over the years, although it is purported to be a popular choice for the most recent graduates (Mechanic, 1979). Hence, it may be several years before we see any movement within this category.

What factors have fostered the decline in solo practice? What are the advantages of affiliation with colleagues on a small- or large-scale basis?

One issue is clearly economic. The increasing numbers of new physicians finishing medical school and postgraduate training each year is creating the need for different means of entering the professional mainstream. The desirable locations for practice, the urban centers and suburbs, are overpopulated with physicians; the rural and underserved areas do not attract the large numbers of newly trained specialists. Thus, new physicians are finding fewer opportunities to start practices from scratch. This is compounded by the high cost of equipping and maintaining a medical practice. A survey by Medical Economics (reported in Wechsler, 1976), of total professional expenditures for all solo self-employed physicians, shows a median in 1972 of \$22,080, with a range among specialties from \$11,250 for psychiatrists to \$26,460 for obstetrician/gynecologists. Practice costs today are notably higher. Over the ten-year period 1970 - 1980, professional expenses of the typical physician rose from \$24,300 in 1970 to \$58,100 (projected for 1980). Thus, the professional expenses have more than doubled during this period (Goldfarb, 1981), although increases varied across specialties. These increases have, in part, been the result of the "malpractice insurance crisis of 1975," which undoubtedly affected practice costs. For most physicians, the skyrocketing premiums of 1975

have approached stability, but its effects are still felt (Henderson, 1978). Malpractice premiums in 1978 ranged from an average of \$1860 per year for pediatricians to \$8050 for obstetrician/gynecologists (U.S. Department of Commerce, 1980).

An additional financial problem, for recent graduates 'more so than earlier cohorts, is the substantial debts incurred during undergraduate education (see footnote 4, Chapter 5). To undertake additional loans, for the purpose of establishing a practice, for many is unthinkable. One physician we interviewed, who recently completed his internal medicine residency, comments on the problems of setting up a solo practice:

. . . you have to take out a huge loan; you're going to hire somebody to help you, you have to think about that person's social security, unemployment, vacation time. You have to think about leasing versus buying equipment, hospital privileges, etc. I didn't ever realize. [17]

He feels that medical education does not prepare one to adequately deal with these issues:

. . . when you get your degree and get your certification . . . you're thrust into starting a business. But, I never thought of medicine as a business before until about three months ago (upon completion of a residency). I thought of it as a skill or art or something. Now, I am going to have to figure out how to go about the business aspect of it.

One means of coping with the financial burden of a solo practice, for those of our respondents who are determined to pursue it, is to assume part-time or full-time salaried positions "as a way of making money" while simultaneously "building up a private practice." Several of those we talked with worked in clinic settings, for instance, or intended to do so temporarily.

But even those who in theory approve of, or prefer, solo practice are being forced to compromise. Affiliation with other physicians

in a group setting or partnership allows for resources (e.g., capital, facilities, personnel, equipment, income, and patients) to be pooled and shared, thus increasing the likelihood of financial security. Yet, even two or three recent graduates, given today's economy, are unable to accrue the necessary capital to establish and maintain a practice. One solution is to join an established practice, as a partner or member of the group, or as a salaried associate, with the hope that such an "arrangement" will lead to permanent association. Large numbers of recent graduates, however, find themselves competing for relatively few positions.

This situation forces still others to seek an alternate type of employment, in an organization. Organizations, which have gained in popularity over the years, are more available than smaller groups, particularly in urban areas. They have the additional advantage over groups and partnerships in that the responsibility for establishing and maintaining an office space and equipment is removed from the individual physician(s).

A second issue which has encouraged both group and organizational practices is the increasing dependence of physicians on each other due to rapid advances in knowledge and technology; hence, increased specialization.

Physicians working in proximity with colleagues are seen to have certain practical advantages over solo practitioners. On a basic level, they are able to share responsibility for the patient population, easing one's schedule in terms of hours worked, vacation, time for continuing education courses, etc. This is noted as a convenience by one of our respondents:

There is no way I would go into practice alone. . . . I don't really believe in it. I don't think it's fair to the physician and I don't think it's fair to the patient. You, as a physician, never get a chance to get a vacation, really. You're always on call and that's demanding. I don't think that's right. I'm a firm believer in group practices. [23]

Another resident, in pediatrics, describes the similar advantages of an organizational setting:

As a pediatrician, you wind up being on call twenty-four hours a day. And, the way I am I would be on call twenty-four hours. I've taken too much from my family in the last ten years to have that kind of practice. [38]

When asked if a group might have solved some problems, this respondent agreed it might, but his personality would interfere:

If they're my patients, they're my patients. No matter how amiable, affable my partner is, they are still my patients and I want to know what is going on. And, I am enough of a maniac to think they will want me and not my partner. Whereas in a hospital-based practice, I'll put in my time. I know I will put in more than my time, but still, I'll have some time for myself.

Obstetricians are similar to pediatricians in terms of the nature of their practice. They must be on call and readily available to patients. One such respondent saw solo practice as impossible for him:

I think anybody that is an obstetrician and goes into solo practice should have his head examined. There's one guy at [a city hospital] who is a real good role model. He is very sensitive and caring and treats his patients the way I would like to . . . but it's killing him. He has a solo practice and it's really wearing him down. And, I think that seeing him practice medicine the way he wants to, by himself, is very difficult. [27]

But colleagues were seen to fill still another function, and this was perhaps the more significant factor. That is, they are able to share ideas and knowledge. One respondent said he wouldn't want to be "strictly in private practice" because he "hasn't seen any good doctors practice that way." When asked what accounts for this difference, he said: "[The] lack of interchange of ideas. Lack of exposure

to people of high quality in other subspecialties. Mostly, just lack of exposure to other people." Another, who also "doesn't like the idea of private practice" had a similar view: "I like to be with people who have experience in my field, so you can talk about it. . . . You are associated with people on the same level and on a different level."

Physicians in such settings feel a pressure to maintain and update their knowledge, knowing they may be called upon for advice or consultation by colleagues. This is seen as a particular advantage, in that it forces one to become "better" as a physician or clinician:

I think to become better in the profession, you have to have the challenge of having other people with different ideas. Motivation to keep on learning. Other people challenge you: 'Do you know this, do you know that?' You heard that the other person read [a published article], so you get it and read it yourself. So you keep learning. [31]

While both group settings and organizations allowed physicians to share knowledge, skill, and patient care, organizations, alone, were seen to have a unique advantage. Some physicians were particularly concerned about ideological and moral issues in medical practice.

For the most part, what solo practice and group affiliations have in common is that they are private practices based primarily on fee-for-service payment. Some respondents were opposed to this in principle--"it is immoral"--and saw organizational employment as a way of dealing with this issue. "I don't believe in fee-for-service. I don't like doctors making a lot of profit."

Yet the potential loss of autonomy in such a setting was something that had to be reconciled with the perceived advantages.³ This same respondent who resents the profit motive in medicine talks about her dilemma:

But, once in a while, when I feel frustrated in medicine, I imagine private practice as a way to have satisfaction because you have complete control over what you do. I'm not proud of it. I want to find a way around it. Find a way to be in cooperation with other people rather than opt out of the struggle by going into private practice. [51]

Organizational settings--hospitals, clinics, HMOs, for instance --allow physicians to be "politically" active in ways private practice would not. A number of physicians, as we recall, deliberately chose medicine as a career because they saw it as a vehicle for social change. In an organization, as an administrator, teacher, or researcher, some see an opportunity to affect larger numbers of people than in the private practice of medicine, simply because they can be involved in policy and decision-making.

Others see organizations as a political tool in that they can work with particular segments of the population, for instance, women, the poor, the chronically ill. One physician, a woman, left her internal medicine residency before completing her first year for precisely this reason. She decided to work in a women's prison:

I feel like a new person. I'm very happy. . . . I don't know if I'll go back into residency or not. I don't even care at this point. I feel like I've finally gotten to the point where I can do what I want, which is out-patient medicine, and do it for women in a setting that is really socially useful. [9]

Age at Matriculation to Medical School: Influence on Practice Arrangement

In our discussion thus far we have been concerned with changes in the medical profession which have fostered a movement away from the traditional mode of medical practice, solo practice. Another source of concern has to do with the nature of medical recruits--their social background, medical school experience, and beliefs and values, which might also affect this movement. Here we may take as an example our

older matriculants, who clearly differ from their younger peers, as we have seen, not only in terms of their background and medical training, but in the medical careers they have chosen, as well. Older matriculants are more likely to practice general medicine. What is the effect of age on type of practice arrangement? If older matriculants fit the model of the traditional physician--the general practitioner--are they likely to assume the traditional mode of practice as well--solo practice?

Table 18 shows that, indeed, older matriculants more often practice in solo settings. More than one-third of older, as compared with one-fifth of younger matriculants, are solo practitioners.

Table 18

Practice Arrangement
(Physicians-in-Practice)

	<u>Younger</u> %	<u>Older</u> %
Solo Practice	21	35
Affiliation (Total)	(40)	(28)
Partnership	10	8
Arrangement	4	5
Group practice	26	15
Organization (Total)	(37)	(35)
Medical school	10	5
Hospital (non-government)	15	18
Government (hospital/agency)	12	12
Other ^a	<u>2</u>	<u>2</u>
Total	100	100
(Number of persons)	(860)	(1407)

^aSee note a, Table 16.

Younger matriculants, on the other hand, more often opt for affiliation in a group setting; 40 percent, compared with 28 percent of younger matriculants. Partnerships and arrangements do not seem to distinguish between both age groups, however. It is group practice, *per se*, which accounts for most of the difference, with 26 percent of younger, compared with 15 percent of older matriculants, in this setting.

Also, there is virtually no difference when organizational settings are considered. Just over one-third of older and younger matriculants are employed that way. It may be worth noting, however, that younger matriculants are twice as likely as older matriculants to be employed in medical schools, although the absolute difference is not large (10 percent to 5 percent, respectively).

Again, it becomes useful to examine trends in practice, this time comparing younger and older matriculants. If older matriculants are currently meeting more of the demand for solo practitioners, can we expect this pattern to continue? Or, like their younger peers, are they shifting towards organizational based medicine? (Table 19)

Table 19

Practice Arrangement by Year of Graduation
(1963-1972) and Age at Matriculation

	1963		1968		1970		1972	
	Younger	Older	Younger	Older	Younger	Older	Younger	Older
	%	%	%	%	%	%	%	%
Solo	33	46	23	39	17	34	15	28
Affiliation	47	30	47	32	37	33	40	33
Organization	<u>20</u>	<u>24</u>	<u>30</u>	<u>29</u>	<u>46</u>	<u>33</u>	<u>45</u>	<u>39</u>
Total	100	100	100	100	100	100	100	100
(Number)	(234)	(519)	(210)	(271)	(180)	(224)	(169)	(215)

While overall older matriculants seem to be inclined toward solo practice (Table 16), we see that along with their younger peers they are moving away from it, specifically in the direction of organizational practice. (Table 19)

Between 1963 and 1972, the proportion of younger matriculants in solo practice declined by more than one half, from 33 percent to 15 percent. Similarly, the proportion of older matriculants opting for solo practice declined from 46 percent to 28 percent. Yet, we must not dismiss the fact that older matriculants still are more apt to be solo practitioners--28 percent, as compared with 15 percent of younger matriculants--among 1972 graduates. It is also noteworthy that, while both age groups have moved away from solo practice, each year since 1963 the percent difference between younger and older matriculants in solo practice has remained unchanged, at 13 percent. For instance, among the earliest graduates--1963--46 percent of older compared with 33 percent of younger, and among the later graduates--1972--28 percent of older as compared with 15 percent of younger matriculants were in solo practice.

The overall trend toward organizational practice, first seen in Table 17, is similarly apparent when each age group is considered separately. Between 1963 and 1972, the proportion of younger matriculants entering organizations has more than doubled, 20 percent to 45 percent. At the same time, older matriculants have entered this arena in increasing numbers, 24 percent to 39 percent. Until 1968, it appears that both age groups were similarly employed, with most of this shift occurring some time around 1970.

By and large, physicians in affiliation with others (in

partnerships, groups, arrangements) have remained most stable. Yet, upon closer examination, it appears that older matriculants are the ones least likely to move in this direction, increasing in proportion only 3 percentage points between 1963 and 1972. On the other hand, younger matriculants have declined, with nearly one half of 1963 graduates in affiliations, compared with only just over a third among 1970 graduates, and then increasing slightly to 40 percent among 1972 graduates--still under the 1963 figure, however.

Despite the continuing movement away from solo practice, older matriculants still fit the stereotypical model of the old-time physician--with more than one-fourth of the more recent graduates choosing it, while only 15 percent of younger matriculants do so.

What accounts for this continued propensity toward solo practice for older matriculants? One might, in fact, have expected the opposite finding. That is, older matriculants would be more likely than younger matriculants to opt for group or organizational settings. After all, they have already delayed career goals, incurred enormous expenses and debts, expended remarkable energy and time, so that joining an established practice or organization would seem, on the surface at least, to be the safest, surest, least expensive route for these physicians. Why then do they tend to practice on their own more often than their younger peers?

Perhaps more so than other medical recruits, older matriculants are the ones for whom independence and autonomy are likely to be particularly important. We recall, many of them have chosen to abandon successful careers to take on the challenge of medicine, against all odds, and they have succeeded. Yet, for most it was a constant

struggle, often done alone, without the support of family and friends.

One physician reveals this aspect:

I'm a loner. I came this far on my own. I want to make it on my own. I really mean that. . . . At the beginning, I was going to affiliate with somebody, but I don't like being under anybody's thumb. I want to do the things my way. If I make a mistake, I learn from my mistake. And, I don't want anybody wagging their finger under my nose, 'I told you to do this.' I make my own decisions. But, I go around, I ask, I get opinions. . . . I take them in light of my own thoughts, and then I see what I want to do. I'm very strong-willed. [2]

While it is impossible to generalize based on a few cases, it should be noted that three of the respondents who preferred solo practice were among the oldest matriculants in our sample. They had spent many years prior to medical school in professions which required a great deal of autonomy. Two were police detectives; one was a social work administrator. It is not surprising that such individuals might find it difficult to work under another physician, for example, a senior partner in a group or for a director of a medical service in a hospital-based position. This may become especially problematic if one is the same age, or older, than one's superior.

And, it is becoming increasingly difficult for new physicians to secure positions with more established colleagues due to the increasing numbers of newly trained physicians competing for relatively few positions. This raises the question of the process of recruitment and selection for entry into the profession as a practicing physician. Although we will not deal with this here, it is important to examine a few of the issues which may confront older recruits into medicine who seek employment. One factor is clearly their credentials in terms of medical education. We have seen that older matriculants are more likely to attend foreign schools and lower quality schools than younger

matriculants, and so it may be that they are not as qualified as the more typical recruit. Yet, we have also seen that the nature of their undergraduate training has not jeopardized their chances for postgraduate training, at least as indicated by the number of older matriculants who train in the top twenty-five programs in the country, a figure closely resembling that for younger matriculants. If we assume for the moment that one's credentials as an older matriculant are comparable to those of the younger recruit, then something else may be operating. Perhaps one needs more than academic or professional credentials. One needs the appropriate contacts, as well. Oswald Hall, as early as 1946, has described the process by which neophyte physicians are recruited into the profession by a process of sponsorship, in which the established members, which he calls "the inner fraternity," exert informal control over their careers. Such sponsorship is likely to be as "nebulous" as encouragement or as substantial as "designating the protégé as successor to the sponsor," according to Hall (1946:152). In describing "office practice," in particular, Hall states: "The desirable medical practices of the community persist beyond the lives of the founders. The latter can invite younger men to share and inherit such practices. Such an invitation carries with it the prestige associated with the office itself, and with the name of the established doctor. . . . The members of the inner fraternity have a monopoly over such favors." (p. 162)

It may be that older matriculants do not choose to develop the appropriate relationships with colleagues, or perhaps they are not permitted to do so. Because of their atypical background--in terms of age, previous careers, etc.--they may isolate themselves, or be

isolated by others, thus not being part of this colleague network. And, here, one aspect of their undergraduate training may be a factor. Older recruits may be at a particular disadvantage in that they have trained abroad, at a time when one's earliest contacts with established physicians are made. If this were the case it would seem that foreign medical graduates would be more likely to be in solo practice.

(Table 20)

Table 20

Practice Arrangement by Location of Medical School
(Physicians-in-Practice)

	<u>Foreign</u>	<u>United States</u>
	<u>%</u>	<u>%</u>
Solo practice	41	29
Affiliation	19	36
Organization	<u>40</u>	<u>35</u>
Total	100	100
(Number of persons)	(315)	(1894)

We see that foreign medical graduates are substantially more likely to be in solo practice settings, 41 percent compared with 29 percent of United States graduates and consequently less likely to be in affiliation with other physicians in groups, partnerships or arrangements, 19 percent compared with 36 percent. In organizations, where perhaps more universalistic criteria are used, foreign medical graduates are comparable to their American trained colleagues, with similar proportions, 40 percent and 35 percent, respectively, in such settings.

However, when younger and older matriculants are compared, we see that regardless of where a physician attended school, older

matriculants still lean toward solo practice. (Table 21)

Table 21

Practice Arrangement by Location of Medical
School Attended and Age at Matriculation
(Physicians-in-Practice)

	<u>Foreign</u>		<u>United States</u>	
	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>
	%	%	%	%
Solo	28	43	21	34
Affiliation	28	18	41	30
Organization	<u>44</u>	<u>39</u>	<u>38</u>	<u>36</u>
Total	100	100	100	100
(Number)	(36)	(279)	(803)	(1091)

Among foreign medical graduates, 43 percent of older matriculants as compared with 28 percent of younger matriculants are solo practitioners. Similarly, among U.S. graduates, 34 percent of older matriculants compared with 21 percent of younger matriculants are solo practitioners. Location of medical school seems to be the less relevant variable for type of practice, although clearly, both among younger and older matriculants, those who attended school abroad are slightly more likely to be in solo practice.

Specialty Choice: Influence on Practice Arrangement

The traditional mode of practice, solo practice, seems to be historically lined with general rather than specialty medicine. And, if we examine our AMA data, we see that this is so. (Table 22)

Table 22

Practice Arrangement by Specialty Choice
(Physicians-in-Practice)

	<u>General/Family Practice</u>	<u>Internal Medicine</u>	<u>Surgery</u>	<u>Other</u>
	%	%	%	%
Solo	45	24	34	23
Affiliation	33	32	38	30
Organization	<u>22</u>	<u>44</u>	<u>28</u>	<u>47</u>
Total	100	100	100	100
(Number of persons)	(470)	(380)	(355)	(1062)

Nearly one-half of general practitioners (45 percent) are in solo practice, compared with 34 percent of surgeons, 24 percent of internists, and 23 percent of those in all other specialties. Conversely, general practitioners are least likely to be found in organizational settings, 22 percent, followed by surgeons (28 percent), internists (44 percent), and all other specialists (47 percent). Generalists and specialists are similarly found in affiliations--just about a third of each.

Could this, then, explain the different practice styles of older and younger matriculants? If we recall, older matriculants more often than younger matriculants opt for general practice. We might expect this to account for their inclination toward solo practice, as well.

Yet, when we introduce age at matriculation into this analysis, it becomes apparent that something other than specialty choice, alone, is operating. Table 23 shows that those who enter medicine at a later age--whatever their specialty--are more likely than younger recruits to be solo practitioners. This is most dramatically illustrated among

general practitioners, where we might expect a preponderance of solo practitioners. And indeed, Table 22 showed that 45 percent of general practitioners were in solo practice. But the concentration of general practitioners in solo practice appears primarily to be older matriculants. Fully one half of older matriculants in general practice are solo practitioners, compared with 27 percent of younger matriculants--a difference of nearly twice as much. Younger recruits in general practice rather opt for affiliation--nearly one half (49 percent), compared with 29 percent of older matriculants.

Table 23

Practice Arrangement by Specialty Choice
and Age at Matriculation
(Physicians-in-Practice)

	<u>General/Family Practice</u>		<u>Internal Medicine</u>		<u>Surgery</u>		<u>Other</u>	
	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>
	%	%	%	%	%	%	%	%
Solo	27	50	18	31	28	41	19	26
Affiliation	49	29	41	22	41	34	36	27
Organization	<u>24</u>	<u>21</u>	<u>41</u>	<u>47</u>	<u>31</u>	<u>25</u>	<u>45</u>	<u>47</u>
Total	100	100	100	100	100	100	100	100
(Number)	(93)	(372)	(202)	(178)	(177)	(178)	(388)	(674)

Even when older recruits specialize, they still prefer to practice alone. Most notably among internists and surgeons, and to a lesser degree among other specialists (combined), older matriculants more often choose solo practice. While the disparity between the two age groups in the specialties is not as dramatic as among general practitioners, it is nonetheless noteworthy. For instance, among internists, 31 percent of older matriculants, compared with 18 percent of

younger matriculants, are solo practitioners; among surgeons, 41 percent of older matriculants compared with 28 percent of younger matriculants are in solo practice; and among those in other specialties, the difference is 26 percent to 19 percent, respectively. Group arrangements, on the contrary, are more popular among older matriculants, for each medical area. Organizational settings are equally popular among younger and older matriculants in the various specialties.

This chapter, along with the preceding chapter, has focused on the structural aspects of the practice of medicine in terms of type of practice (specialty versus general medicine), work setting (geographic location), and practice arrangement (solo, affiliation, organization). We have seen that physicians vary in their approach to and practice of medicine by the career patterns they choose. Of particular concern has been the differences between older and younger recruits to medicine. We have seen that age at matriculation, independent of other variables, seems to influence one's choices. Overall, older matriculants are more likely to fit the traditional image of the physician, as one who practices general medicine in a solo setting. At the same time, they are similar to their younger colleagues in that they are amply represented in specialties and in group or organizational settings, as well. (A more detailed summary of similarities and differences between the two age groups will appear in Chapter 10.)

Chapter 9 will be concerned with another dimension of the practice of medicine--the behavioral and attitudinal aspects of being a physician--with regard to patients, the profession, and society. And, more immediately, Chapter 8 will parallel this and the preceding chapter by examining the impact of physicians' sex and age on career patterns.

Notes

¹The percent of the population in each county that was defined as urban ranged from 0 to 100 percent. The AMA respondents were distributed among each type of county; for instance, the percent of physicians who practiced in counties that were 0 percent urban, 2 percent urban, and so on. To simplify analysis, categories of "percent urban" were re-coded and collapsed, based on the distribution of physicians (rather than the distribution of "percent urban"). That is, 24 percent of physicians practiced (resided) in areas ranging from 0 to 30 percent urban; 25 percent, in areas 31 to 45 percent urban; 26 percent, in areas 45 to 63 percent urban; and 25 percent, in areas 64 to 100 percent urban.

The rate of physicians per 100,000 in the population ranged from 3 to 846. Using the same procedure, we re-coded and collapsed these into 4 broad categories, again based on the distribution of physician respondents: 25 percent of physicians were in areas with 3 to 11 physicians per 100,000 people; 25 percent, in areas with 12-41 physicians per 100,000; 25 percent in areas with 42-63 physicians per 100,000, and 25 percent in areas with greater than 64 physicians per 100,000.

Each of these variables--percent urban and rate of physicians per 100,000 population--were dichotomized, to further simplify analysis.

²The description of each type of practice arrangement is provided by the AMA Division of Data Release (personal communication with Don Danaï, May 4, 1981).

Physicians who respond to the AMA Masterfile census each year are asked to indicate the total number of hours per week they spend in each of the settings. Hence, the distribution of physicians is based on self-reported descriptions. It should be noted that certain arrangements, for example, Health Insurance Plans (HIP) or Health Maintenance Organizations (HMO) are not designated as separate categories by the AMA. Respondents, in this case, classify themselves in one of the available categories, though it is not clear which.

³See Freidson (1975) for a case study of a prepaid group practice, which explores the formal and informal mechanisms of social control among colleagues.

Chapter 8

Medical Education, Specialty Choice, and Practice Setting: Male and Female Physicians Compared

One of the themes which emerged from the research, though not anticipated, was the difference between male and female older matriculants. Our interviews with women suggest that, as older recruits to medicine, they share with men many experiences, attitudes, and behavior. Yet, it is equally apparent that, as women, their situation is in some ways unique. And so we are devoting a separate chapter to the career patterns of male and female older matriculants--how they are alike, and how they differ.

Career Goals

The early choices of women regarding careers were undeniably influenced by the period in which they reached adolescence and early adulthood--the 1950s and 1960s, when the prescribed role for women centered around the home rather than the workplace. The later decision, during adulthood, to pursue a career in medicine was no less influenced by a second historical period--the late 1960s and early '70s, with the emergence of the women's movement.

For the first time, women began to enter medical school and the profession in significant numbers. Several factors have contributed to this, the most basic being the changing selection and admissions criteria. In 1964-65, for instance, nine percent of women applicants

were accepted, as compared with 23 percent in 1975-76. Today, women account for approximately one-third of entering medical school classes (Wallace, 1980; Wilson, 1981; AAMC, 1981).

Second, in addition to their increased chances of gaining acceptance in recent years, the changing structure of the health care system has made medicine a more realistic option for women. Although contemporary medicine is predominantly a private entrepreneurial structure, there have been recent attempts to expand health care delivery with the advent of group practices and bureaucratic settings. Such opportunities more readily allow women to combine their work and family responsibilities. Regarding the traditional form of medicine, solo practice, Ginzberg wrote (1969: 141): "The aggressiveness required for successful solo practice, the competitiveness, the limited possibilities for allocating or deputizing basic responsibilities--all are potential sources of conflict for a lifestyle that combines family and profession. In the selection of a career, these conditions are likely to deter a good number of even strongly motivated women students."

And, third, the structure of medical education is changing as well, becoming more amenable to women students. The curriculum of both undergraduate and graduate education has typically been rigidly structured on a full-time basis which is consistent with the work patterns of adult men in our society, but non consistent with that of women. In recent years, there has been an attempt to modify these programs. While there still remains little flexibility at the undergraduate level, residencies have become less demanding in terms of the number of hours on-call. In addition, experimental programs have been set up which are tailored to meet the needs of women. For example, one

psychiatry program has been extended to four years (rather than three), to allow for summers off, when children are typically out of school (Phelps, 1968). Other programs have allowed residents to share a residency, by splitting the time required. Although this, too, lengthens the number of years of involvement (although on a half-time basis), it permits greater flexibility.

With medicine now both an acceptable and appropriate career for women, we are faced with a cohort of women who, as adults, wish to take advantage of this career opportunity. A typical case would be the woman who was age twenty-three (the average age at matriculation to medical school) in 1965, and was thirty-three in 1975. With the influence of the women's movement, the changing role of women in society, and changing medical school admissions policies, older women are now taking advantage of a second chance to pursue medicine. In fact, those applying to medical school at a later age are increasingly women. In 1971-72, for instance, 16 percent of all applicants over age 27 were women; in 1975-76, 28 percent were women. Furthermore, women older matriculants have a higher acceptance rate. In 1975-76, 21 percent of older male applicants were accepted, as compared with 29 percent of older female applicants. This differential acceptance rate is greater than that between men and women of all ages. In other words, older women fare particularly well (Dube et al, 1973; Gordon and Johnson, 1977).

Our own AMA sample reflects this pattern. Overall, 84 percent are men and 16 percent, women. When broken down by sex and age, however, the proportion of women increases with advancing age at matriculation, while conversely, the proportion of men declines. (Table 24)

Table 24

Sex, by Age at Matriculation

	<u>Younger than 28</u>	<u>28 - 31</u>	<u>32 or older</u>
	%	%	%
Females	12	14	20
Males	<u>88</u>	<u>86</u>	<u>80</u>
Total	100	100	100
(Number of persons) (1598)		(1847)	(698)

The increasing numbers of women in medicine has fostered concern about how they will affect the structure of the profession in terms of career patterns, e.g., specialty, location, practice arrangement, productivity, etc. The basic question is, how do they compare with their male colleagues? The pool of older women raises additional questions. How do they compare with men and women who matriculate at the traditional age? And how do they compare with older men?

Medical Education and TrainingLocation of School

Overall, older matriculants are more likely than younger matriculants to attend foreign medical schools, as we have seen (Chapter 5). However, age is more of a factor for men. (Table 25) Younger, as compared with older men, more often attend U.S. medical schools--92 percent to 79 percent. Among women, age makes virtually no difference, with 88 percent of younger, and 87 percent of older females attending U.S. schools. While the stereotypical medical recruit--the young man--has the best chance of being educated in the States, the older woman does not fare badly. She is slightly better off than her male age peer in gaining acceptance to a U.S. school (87 percent to 79 percent,

respectively), and nearly as well off as the younger man (87 percent to 92 percent, respectively).

While admissions and selection policies tend to favor older women over men, there is reason to believe that the location of school attended is determined by personal considerations as well. Marital status is one such factor. Typically it is the career of the husband which determines the geographic mobility of the couple (Eisenberg, L., 1981). Hence, the male older matriculant might more often expect his wife and children to accompany him to a foreign country for his training than the reverse. This makes sense in view of our data from those we interviewed. Although the number of individuals who trained abroad is small, none were married women, while several were married men. The reluctance of married women to train outside the U.S. was very much dictated by their husbands' obligations here, as we recall from some of their comments (Chapter 5).

Table 25

Percent Attending U.S. Medical Schools
by Age at Matriculation and Sex

	<u>Females</u>	<u>Males</u>
Younger	88	92
Older	87	79
(Number of persons)	(343)	(1699)

Type of Control

Overall, older and younger matriculants are equally likely to attend private and public medical schools, as seen in Chapter 5. However, when sex is considered, there are some differences, most notably

among older matriculants. (Table 26) Whereas for younger matriculants, sex makes little difference--with 49 percent of women and 44 percent of

Table 26

Percent Attending Private Schools (U.S.)
by Age at Matriculation and Sex

	<u>Females</u>	<u>Males</u>
Younger	49	44
Older	50	40
(Number of persons)	(326)	(1627)

men attending private schools, this difference doubles among older matriculants (50 percent compared with 40 percent, respectively). While this difference is suggestive, it is by no means dramatic. From our interviews, it appears that the type of school, public or private, had virtually no bearing on the selection of a school as judged by the absence of discussion around the issue.

Quality of School

Older and younger matriculants may be distinguished by the quality of school attended, with younger ones more often attending higher quality schools (Chapter 5). When sex is considered, older females seem to be at a particular disadvantage. (Table 27) They differ from male older matriculants, as well as from all younger matriculants. Approximately two-fifths of female older matriculants as compared with approximately one half of those in other categories attend high quality schools. Despite the fact that among older matriculants, women are more likely than men to get accepted to medical school, it appears that they do not necessarily always get accepted to

Table 27

Percent Attending High Quality^a Schools (U.S.)
by Age at Matriculation and Sex

	<u>Females</u>	<u>Males</u>
Younger	47	49
Older	38	50
(Number of persons)	(331)	(1633)

^aSee note a, Table 2.

the better schools. Or perhaps they do not apply to the better schools. It may be that men are in some ways more selective about where they go to medical school.

Career Patterns

The choices of women physicians for particular specialties and practice patterns will have increasing importance for the overall distribution of physicians, as more and more women enter the medical profession. In addition to the factors which all physicians must consider in their career choice, women, more than men, must also be concerned with the impact of parenthood on these decisions. It is a biological fact that women become pregnant and give birth, and it is a social fact that women continue to assume major responsibility for child-rearing (Eisenberg, C., 1981). Kosa and Coker (1965) suggest that any attempt to explain sex differences in the labor market should consider the relationship between sex roles and professional roles as they are defined by social norms. Compatibility between the two roles is an important factor in determining the dominance of men or women in any profession. (For a general discussion of the issues of women and work, see the

annotated bibliography by Hurst and Zambrana (1981); for a specific discussion of women physicians, see, for example, Mandelbaum, 1976; Cohen and Korper, 1976, Parts I and II; and Borne and Wikler, 1978.)

Specialty Choice

While it is not clear whether it is due to a process of self-selection into certain areas, or to structural barriers, it is clear that there are differences between men and women in specialty choices (see, for example, Epstein, 1970; Aho, 1972; McGrath and Zimet, 1977). According to Wallace (1980: 204), ". . . women in medicine have fewer career possibilities in such fields as surgery (including various subspecialties), obstetrics and gynecology, and in academic careers across the board." The largest numbers of women have entered general practice, internal medicine, psychiatry, and pediatrics (Speiler, 1976; Wallace, 1980; Wilson, 1981). It has been suggested that perhaps some areas of medicine are in fact more appropriate for women. Margaret Mead cites pediatrics and obstetrics-gynecology as examples (Avery, 1981). Nadelson et al (1981) found that pediatrics, as well as psychiatry and child psychiatry were perceived as more advantageous for women. Such fields are relatively "'non-competitive,'" and deal with "'feelings'" and concern areas in which women would be more "'sensitive'" (p. 52). In addition, they have relatively short training periods.

Some sex-stereotyping in medicine seems contradictory (Epstein, 1970; Quadagno, 1978; Nadelson et al, 1981). Although obstetrics-gynecology seems appropriate for women, they are not inclined to enter it. The reason, according to Mead, is that obstetrics-gynecology is a very

lucrative specialty and thus very attractive to men. She notes that in general, men are attracted to the higher-paying areas (Avery, 1981; see also, Wilson, 1981). This is supported by an AMA survey which shows that the average net income from medical practice in 1972 was \$47,945 for men and \$27,588 for women. On an average, female physicians earned only 57 percent as much as male physicians. This varies among the specialties, and in part reflects differences in the number of work hours (Wallace, 1980). Pediatrics, which typically attracts women, seems appropriate in that it incorporates the mothering role within the work role (Kosa and Coker, 1965). Yet, it seems inappropriate in terms of its work schedule. It has more unscheduled time demands than many other medical specialties, thus making it incompatible with other female role demands. Other specialties, such as ophthalmology, plastic surgery, dermatology, and radiology may be more advantageous for women in that they have fewer emergencies, more controllable hours, and are less physically and emotionally demanding than pediatrics, for example. Yet, they attract few women (Epstein, 1970; Quadagno, 1978; Nadelson et al, 1981).

One way of understanding such contradictions has been suggested by Matheson and Smith (1977). They found that perhaps the specialty choices of women were not really their preferences. A study of medical students revealed that women were twice as likely to choose pediatrics than to state that they preferred it. There may be external as well as internal pressures directing women students toward the so-called "female specialties" which are not necessarily commensurate with their interests.

Our data reveal that women do indeed gravitate toward the

traditional female specialty areas. (Table 28)

Table 28

Specialty Choice, by Sex
(Physicians-in-Practice)

	<u>Females</u>	<u>Males</u>
	%	%
General Practice	15	19
Internal Medicine	20	18
Surgery	4	18
Obstetrics	4	6
Pediatrics	14	4
Psychiatry	12	8
Radiology	4	5
Anesthesiology	2	4
Pathology	3	3
Other	<u>22</u>	<u>15</u>
Total	100	100
(Number of persons)	(342)	(2610)

General practice, internal medicine, psychiatry, and pediatrics account for nearly two-thirds of the women in our sample. Pediatrics, in particular, seems to be sex-linked, with three times as many women as men choosing it. Surgery, on the other hand, which has been referred to as "the most physical" of the specialties (Avery, 1981:81), tends to be a male-oriented specialty; more than four times as many men as women in our sample chose it.

Age at matriculation seems to be associated with the specialty choices of men and women, but more so for men. Among men, older and

younger matriculants differ sharply when general/family practice, and internal medicine are considered. Nearly three times as many older men choose general/family practice (25 percent to 9 percent). In

Table 29
Specialty Area, by Age at Matriculation and Sex
(Physicians-in-Practice)

	<u>Males</u>		<u>Females</u>	
	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>
	%	%	%	%
General/Family Practice	9	25	12	17
Internal Medicine	26	12	19	21
Surgery	22	15	5	4
Obstetrics	6	7	3	4
Pediatrics	6	4	23	10
Psychiatry	7	9	6	15
Radiology	7	4	5	3
Anesthesiology	3	4	4	1
Pathology	3	3	3	3
Other	<u>11</u>	<u>17</u>	<u>20</u>	<u>22</u>
Total	100	100	100	100
(Number of persons)	(1054)	(1556)	(115)	(227)

fact, this is clearly the most popular choice among older men--with fully one-fourth of the sample in this area. Internal medicine, in contrast, is the most popular choice among younger men--with just over one-fourth (26 percent) of the sample choosing it. This is twice as many as among older men (12 percent).

Among women, age at matriculation appears to make relatively little difference in specialty choice. Older women are very slightly

more likely to be general/family practitioners, compared to younger women (17 percent to 12 percent); but hardly any different when internal medicine is considered (21 percent to 19 percent). In fact, in internal medicine, older women are more similar to younger men than to their own male age peers.

Surgery presents an interesting case. Typically a male-dominated specialty, it is particularly attractive to males who begin their training at the traditional age. Nearly one-fourth of younger matriculants are surgeons (22 percent), second only to internal medicine (26 percent). There is less difference between younger and older matriculants than one might expect, given the previous examples of general/family practice and internal medicine. Yet, the tendency is still in favor of the younger recruit (22 percent to 15 percent). Women, regardless of age, are rarely surgeons. Among younger matriculants men dominate four to one; among older matriculants, it is more than three to one in favor of men.

Although general practice, internal medicine, and surgery revealed most of the differences between younger and older matriculants, the addition of physician's sex to the analysis reveals that age at matriculation is associated with specialty choice in other areas as well. For pediatrics, we saw in Table 28 that younger and older matriculants did not differ from each other. And for men, age still has no effect. But among women the age difference is dramatic. More than twice as many female younger matriculants as older matriculants are in pediatrics, 23 percent to 10 percent. While we have seen that women, generally, are three times as likely as men to be pediatricians, the female younger matriculants are four times as likely as men of any

age to be pediatricians. Although still likely to enter this traditionally female-linked specialty, older women do so less often.

Interestingly, the reverse is true for another female-linked specialty--psychiatry. Older women, in this case, are much more likely than young women (more than twice as likely), or men of all ages (nearly twice as likely) to be psychiatrists.

Practice Setting

Male and female physicians tend to differ in the type of practice they designate as their primary form of employment. Studies have shown that women physicians are less likely to be in private practice; are more likely to be salaried rather than self-employed; and to have fixed hours of work (see Phelps, 1968; Ginzberg, 1969; Powers et al, 1969; Kehrer, 1974; Cohen and Korper, 1976; Avery, 1981, and Wilson, 1981). Such differences are reflected in the AMA data as well. The men are fairly evenly distributed among the three major categories of employment: solo practice (31 percent); group affiliation (33 percent); organizational setting (36 percent). (Table 30) The women, however, are heavily represented in organizational settings (56 percent, considerably more so than their male colleagues. Men are more likely than women to be found in solo practice (31 percent compared with 19 percent). For those in group affiliations, there is not much difference between the sexes (25 percent compared with 33 percent, for women and men, respectively).

In order to understand the role of women in medicine, with regard to practice setting, it may be useful to consider the larger issue of the place and role of women in society (Wallace, 1980). Of

Table 30
Practice Arrangement,^a by Sex
(Physicians-in-Practice)

	<u>Females</u>	<u>Males</u>
	<u>%</u>	<u>%</u>
<u>Solo</u>	19	31
<u>Group Affiliation (Total)</u>	(25)	(33)
Partnership	5	9
Arrangement	6	4
Group Practice	14	20
<u>Organizational Setting (Total)</u>	(56)	(36)
Medical School	10	7
Hospital (non-government)	28	15
Government (hospital/agency)	12	12
Other	6	2
Total	100	100
(Number of persons)	(239)	(2028)

^a See Chapter 7 for description of each type of setting.

primary relevance is the obligation traditionally carried by women with respect to marriage and child-rearing (Cohen and Korper, 1976). In recent years, there has been a substantial increase in the proportion of women, in general, in the labor force (with women now totally 52 percent of the nation's labor force), and in the proportion of women physicians in particular (now totalling nearly 14 percent of all physicians, more than double that in 1950) (Bureau of Labor Statistics, March, 1982).

Women professionals no longer need choose between work and a family. Ginzberg (1969: 140), in comparing women of today with those

of the pre-World War II era, refers to the latter as ". . . single-minded careerists." Any woman scientist who married, even late, was regarded "as a traitor to her class when she did."¹ Today, however, the majority of women physicians marry, although less so than in the population as a whole. And they tend to marry colleagues or men in allied fields. But, despite the changing role of women professionals, they are often expected to and do continue to assume primary responsibility for their families.

It should not be assumed that the combination of family and work is devoid of any conflict for men. Women, however, have a unique problem. Often, the time of most intense career building effort occurs simultaneously with the time of building a family. Although male medical students and physicians may be deprived of time with their spouse and children because of the demands of work, they do not have the biological constraint shared by women to have children before they are too old (Borne and Wikler, 1978). While there has been much recent attention to the issue of "delayed child-bearing," particularly among professional women who wait until their early to mid-thirties or later to have a first child (see, for example, DeCherney and Berkowitz, 1982), there is evidence of a significant increase over time of women in medicine who have their children before graduating medical school, probably in their twenties (Cohen and Korper, 1976). This means that during residency and early years of establishing one's career, there are young children. Thus practical considerations must be met if the two roles--family and career--are to be satisfactorily combined. It is being suggested here that for women, the choice of a particular work setting may be related to these constraints. For instance,

organizational settings, which have a tendency to attract women rather than men, offer such benefits as fixed salary, hours, and patient load; the opportunity for sabbaticals or leaves of absence; scheduled vacations; malpractice and health coverage, etc. The time needed for family obligations is less disruptive in such a setting, as compared with solo practice. A study of two medical school classes by Kutner and Brogan (1976) found that about one-tenth of the men compared with nearly two-fifths of the women expected to interrupt their careers at some point. The reasons given seemed to differ for men and women. The men expected to work full-time, then perhaps part-time in order to do other things or to change their type of work. The women expected to take time off or to work part-time in order to have children and/or to stay home with them during the early years. Thus, the advantage of an organizational setting is more apparent for the women.

It is somewhat surprising that more women do not opt for "group affiliations" as well, which seem to offer similar benefits with regard to predictability of work schedules. It was suggested earlier (see Chapter 7) that gaining entree to established practices is more and more limited, as the numbers of available physicians increase. One needs more than credentials; one needs the appropriate contacts. Although women physicians have gained considerable professional recognition and acceptance by their male colleagues in recent years, there still exists the overt and covert attitude that women physicians are less productive and less committed (see Bourne and Wikler, 1978). Hence, they may not be readily accepted into group-type practices. Organizations, on the other hand, tend to use more universalistic criteria in recruiting employees.

When we introduce age at matriculation, as well as sex, into the analysis, we see that while males still predominate in solo practice, regardless of age, older matriculants are more likely to be in solo practice, regardless of sex. (Table 31) Among females, older

Table 31

Professional Employment by Sex and Age
(Physicians-in-Practice)

	<u>Females</u>		<u>Males</u>	
	<u>Younger</u>	<u>Older</u>	<u>Younger</u>	<u>Older</u>
	%	%	%	%
<u>Solo</u> (Total)	10	23	22	36
<u>Affiliation</u> (Total)	(27)	(24)	(41)	(28)
Partnership	5	6	11	8
Arrangement	6	6	4	5
Group Practice	16	12	26	15
<u>Organizational Setting</u> (Total)	(63)	(53)	(37)	(36)
Medical School	19	5	10	6
Hospital (non-government)	29	28	13	17
Government (hospital/agency)	9	14	13	11
Other	6	6	1	2
Total	100	100	100	100
(Number of persons)	(80)	(159)	(780)	(1248)

matriculants are twice as likely as males to be in solo practice (23 percent to 10 percent). Female older matriculants are similar to male younger matriculants in this respect (23 percent compared to 22 percent, respectively). Among males, older matriculants are considerably more likely than younger matriculants to be in solo practice (36 percent compared to 22 percent). Of all categories, male older matriculants are most represented in solo practice--more than one-third.

Among those in some form of group affiliation, only male

younger matriculants seem to differ, with 41 percent in such an arrangement, compared with approximately one-fourth of all others. And it is specifically in "group practice" that the difference occurs. There are almost twice as many male younger matriculants in group practice (26 percent) as all others.

When we look at organizational settings, we see that women far outnumber men, regardless of age at matriculation. More than three-fifths of female younger matriculants, and more than one-half of female older matriculants are in organizational settings, compared with just over one-third of their respective male counterparts. Of particular interest here is medical school employment, with nearly one-fifth of female younger matriculants employed there. This is considerably more than female older matriculants, four times as many, and considerably more than males of all ages (twice as many as male younger matriculants and three times as many as male older matriculants).

In an attempt to understand the sex differences in practice arrangement, we may refer again to the need for women physicians to combine their professional role with a familial role. Female older matriculants, unlike their younger colleagues, may have completed their child-rearing responsibilities prior to entering medical school or practice, or do not intend to marry and/or have children. In contrast, female younger matriculants, who have their children during medical school, residency, or after residency training, are more likely to opt for a practice arrangement that will allow for the combined responsibilities. Thus solo practice may be more suitable for the female older matriculant than for the female younger matriculant, for whom organizational settings seem most likely.

This, of course, does not explain why male older matriculants are also more likely than their younger colleagues to be in solo practice. Perhaps a more plausible explanation here would, again, be the "network theory" (Hall, 1946). Male younger matriculants probably have an easier time than male older matriculants in gaining entree to established group practices.

This chapter has presented an overview, rather than an in-depth analysis of issues relating to career patterns of male and female older matriculants. Our primary focus in this research has been to examine older matriculants, as a category of medical recruits, in terms of how they compare with their younger peers. The issue of sex differences, among older matriculants, is one which emerged in the process of analysis. Hence, the interviews were not geared toward these differences; and to rely solely on the AMA data, as we have done, suggests, rather than allows us to understand the varying career patterns. We raise here the possibility that older matriculants, as a category, be further studied with a focus on sex differences.²

Notes

¹Even in 1957, only 57 percent of all female physicians were married. Fifty-one percent of those who were married were part of a husband-wife doctor team (Phelps, 1968).

²See Chapter 10, on the implication of this research, for a discussion of studies which have appeared while this paper was being written. (See, for example, Gussman, 1982; Kaplan, 1982.)

Chapter 9
Being a Physician: The Implications
of a Late Start Into Medicine

At the outset of this research, we identified two manpower issues as having particular relevance for health care delivery in our society (see Chapter 2). The first, more quantitative, had to do with the numbers and distribution of physicians in terms of their geographic location and specialty. How do we provide more primary care physicians and greater numbers of physicians in medically underserved areas? The second, more qualitative, had to do with the personal and social attributes of physicians. How do we provide physicians who are "humanistic," skilled in interpersonal relationships, despite today's emphasis on specialization?

We have attempted to examine these issues by focusing on one group of physicians, those who pursue a career in medicine relatively late in life (after age twenty-seven). How do they compare with the more typical, younger recruits, in terms of their practice characteristics and with regard to their personal and social attributes as physicians?

Thus far, we have answered only the first part of this question. Indeed, we have seen that older recruits are apt to fill some of our society's health manpower needs. They, more so than younger recruits, favor general over specialty medicine. In other words, at least as far

as practice characteristics are concerned, they more often tend to fit the stereotypical image of the general practitioner. But what kinds of practitioners do they make? It is this issue which will be the basis of the present chapter. Here, though, it becomes more difficult to compare both age groups, since we must rely on our interviews with older recruits rather than on the AMA data which allows for such comparison. Nonetheless, we can present a profile of the late starter into medicine as a practicing physician--his attitudes and behavior regarding his profession and his patients.

The Profession

Most of our respondents are in the midst of their internship and residency years, a unique time in the process of becoming a physician, probably unlike anything they will experience again. It is typically when they begin "to feel like a physician" for the first time. While they have had contact with patients during their undergraduate clinical years--as interns, and more so as residents--they will assume responsibility for the patient "without someone looking over my shoulder," as one physician said. This is at once exciting and terrifying. And, much of their reaction to medicine as a profession is colored by their current status as house officers. For instance, when asked how she felt about being a physician, one woman replied: "I'm not sure I can judge that because what I am now is a resident. And that's very different from anything you will do after."

In Chapter 5, we learned of some of the reactions to residency training. Generally, it was described as horrible. Admittedly, this period, coupled with the preceding experiences in medical school, make neophyte physicians less idealistic about the profession of medicine and

what it means to be a physician. "You cannot be idealistic, you have to be realistic," said one resident in obstetrics-gynecology at one of New York City's largest public hospitals:

You can't have eighty clinic patients in an afternoon between three residents and spend half an hour talking to each one and give them the kind of care they deserve. You're caught in a Catch-22. If you spend too much time, then you are keeping them waiting four and five hours. And to spend too little time, you're doing a disservice to the patient. And you just have to accept it. There's no way you're going to change the system . . . as a resident. So, we all sort of say, this is how it has to be. [27]

And so they blame their growing "cynicism," or "toned-down idealism," or "growing realism" on the system of training which virtually demands twenty-four-hour-a-day performance and commitment. They blame it on being "terribly overworked," "chronically exhausted," "having a terrible week," or a "tough day," or "spending a million nights" or "every third night" on call. In essence, they see this as a temporary state--until their residency years are completed--and they "hold out" in anticipation of better times.

But some among them recognize that there are problems within the profession which are more deeply rooted and pervasive. They worry that the Catch-22 situation described above (respondent 27) will prevail because of the way medicine is practiced today. "I think the average physician gets roped into a structure in which he, even if he has a private practice, is committed to seeing too many people, too many patients--not having a sustained relationship with them," said one respondent. According to this woman, about to begin her residency training, "It's not inevitable, but it's difficult to avoid."

What factors foster or promote this kind of health care delivery, so negatively perceived by our respondents? Several issues stand out as being significant, based on their comments.

Financial Remuneration

Physicians are the highest paid occupational group in this country (Wechsler, 1976). While it would be gratifying to think that all physicians who are overworked, or who see too many patients, do so out of a sense of altruism, this is often only part of the reason. Some of our respondents were critical of their colleagues who appeared to be motivated more by monetary rewards. One woman recalls "a joke" made by a dermatologist to her class in medical school: "One good case of acne and you can put your own kids through college." She feels there is "something inherently crazy . . . about a system where the provider is rewarded financially only when you are sick." While she agrees that most physicians "would be scandalized if you suggest that," it is "subtly true" nevertheless. "Physicians have a very high standard of living and the way in which they maintain that standard of living is to keep seeing more patients and the way to keep seeing more patients is to have them come back more often," she explained.

Another respondent provides one of the rationalizations for high fees used by physicians. She feels they "love" to complain about "being up all night" and "having such a tough life." "It's a great excuse they use afterwards for making a killing with their fees." But it doesn't have to be like that, according to this respondent. Her father, also a physician, provides a model for her:

My father never charged high fees. Even to this day, many times he charges the same thing he was charging many years ago. He says he doesn't care: At least I can sleep well at night. And that's how I feel, too! [47]

This woman brings to mind one of our earlier noted findings (Chapter 7), the lack of emphasis or concern with the financial rewards

of medicine, either in its choice as a career generally, or in the choice of a particular specialty. If we recall, older matriculants tend to opt for the lower paying specialty areas when compared with their younger peers. The more important issue seemed to be financial security rather than the amount of money to be earned. And this was clearly more important to our female respondents, who welcomed the idea of being "self-supporting." While we cannot ignore the fact that medicine is by any definition a lucrative occupation, the "materialistic" demands of our respondents were downplayed. Several of them pointed out that, all things considered, they were financially successful in their previous careers. And furthermore, in the pursuit of medicine, they feel they have "lost out" financially. One former computer programmer, for example, was "making a lot of money," he said, at the time he decided to go to medical school. "I was sort of moving up on the business world, becoming a project manager." But money alone was not important to him:

Money has never been an important factor in my life. I have very few materialistic needs. . . . I don't need a big house and all that stuff. If I wanted to do that, I would have stayed doing what I was doing. . . . It's been eight years of non-productivity, so it's eight years' salary lost. Plus the loans I had taken out. So, financially, I am in a hole. [27]

Another respondent, a former teacher, who at length described his \$65,000 debt incurred while studying abroad, maintains that money, for him, is not the issue. He agrees with the previous respondent that if he "were out for money" he would "go into business." "Because in the business world, you can make a hell of a lot more money than you can as a physician. A physician lives very well, but putting into the business world what I put into medicine, I'd earn five times the amount."

What, then, is the motivation for medicine? Our respondents stress that it is the importance of doing something that is meaningful. For example, the computer programmer said he left that field because it wasn't "fulfilling whatever needs [he] thought medicine could fill." Primarily, he said, computers lacked "human interaction." It was "useless, meaningless," as far as he was concerned. "Who cares if the stock market crashes!" he exclaimed. The critical factor was "loving" or at least "liking" what you do. "Making money becomes the secondary issue. You've got to love what you are doing. If not, then they can't pay you enough to do it. The days are just too long. I didn't want to spend the rest of my life looking forward to Fridays."

A surgical resident doubts that anyone interested purely in money could survive the rigor of medical training, especially in surgery. "You have to love the relationship with people and helping people."

For another former teacher, the reward of medicine comes from the "satisfaction of seeing patients do well." And he is critical of his colleagues who focus more on remuneration. While he feels he may be too "idealistic," he believes that "to do a good job is more important than the remuneration," at least for him.

One of our respondents was hesitant about entering medicine because of the emphasis he perceived on money:

. . . I always was concerned about medicine as primarily a money-making venture for a lot of people in it. Not just the doctors, but for the drug companies, the hospitals. There were all kinds of groups in whose interest it was not to deliver good health care, but to make sure that the money keeps flowing in the direction they liked. And if good health care comes out of it, it's more coincidental than causal. So, I had some apprehension about being sucked into a system I didn't accept. [25]

But, he hoped, and still has hope, he said, that "I could be trained so that I could actually do good for people . . . to bend in the direction

that I wanted."

While it is clear that some among those in the medical profession place a value on money, and in the process do a disservice to patients, some respondents stress that it is the individual who is ultimately responsible for his behavior:

I think it is a very individual thing. You're always going to have the super greedy physician and you're always going to have the sloppy physician, and you're always going to have the good physician. It's the individual. [38]

Prestige and Status

Traditionally, the physician in our society has had "exceedingly high prestige" and "higher status" than any other professional group (Mechanic, 1978:379). This, with the emphasis on the financial rewards of medicine, are major sources of contention for some respondents. Yet, "It is a real double-edged sword in a way," said one respondent. "There's a status involved in being a physician and I won't deny for a minute that I . . . enjoy that." But, on the other hand, she is angered that such "status is accorded, out of hand, just for being a physician." This results from, and continues to affect, the way in which physicians are treated by others. One of our respondents, with both a Ph.D. and M.D. degree, explains that she "resents very much being treated one way until somebody finds out you have a title, and then being treated another way." There is a "god-like status" attached to being a physician which provides them with privileges, even in mundane affairs. One woman describes two situations which irk her: automobile license plates and membership privileges:

I understand the reasoning behind M.D. license plates and I have M.D. plates myself because I need to park, and parking around the hospital is restricted to M.D. plates. It annoys me that people use those sometimes for their own personal advantage. It annoys me

that, for instance, in the Boston marathon, physicians don't need to meet the qualifying test. They can run with the American Medical Joggers Association. I met with the president of the AMJA not too long ago and . . . said I resented it. His rationale was that [physicians] historically provided medical backup to the marathon. But that's not a reason for letting all physicians-- Perrier, you know, provided support to the marathon, and I'm not sure that everybody who works for Perrier, ipso facto, gets to run in the blasted marathon and doesn't have to qualify. [10]

The status of being a physician is reinforced by the symbols attached to the profession, most notably the "white coat." Physicians first become aware of the significance attached to their white coats and stethoscope as they begin their medical training. One woman, a first-year student, described her reaction to her first encounter with her new "status":

So right away we were exposed to being in a hospital, wearing a white coat, which freaks me out. I just kept asking people, why do we have to wear a white coat? I think it's elitist and I was just upset by it. . . . It just felt to me like if I wore a white coat, I was buying into the whole male elitist system of medicine, which I tended to oppose in general. [9]

This last comment suggests that perhaps more frightening to our respondents than the status and prestige accorded to physicians by society is the extent to which physicians accept this and "buy into the system." In a sense, it helps to shape their identity, which respondents fear becomes totally one-dimensional. That is, they are physicians first and foremost--at the expense of being "a person."

This affects not only their relations with patients, but with colleagues and working associates as well. One respondent feels there is a "hierarchy" even within the profession, as defined by prestige. Another, who describes the physicians she has encountered as "hostile," feels "there is a tradition in medical education that your superiors are hostile toward the underlings and the underlings, when they become superiors, do the same thing. And this gets perpetuated." To another,

the entire hospital with "its whole bureaucratic echelons," from administrators to nurses to doctors, is a hostile environment.

Some of those we talked with expressed concern about how to maintain their identity as a "total person." One respondent claims she "doesn't look to physicians or to the medical establishment for [her] primary identity." But how do these individuals resist the years of socialization, the societal as well as professional pressures to conform to a singular standard or model?

One mechanism is to deal with the most obvious, the external symbols, of being a physician--in particular, one's appearance. One former nurse said, "sometimes people make comments about the way I dress and say that I dress like a psychiatric nurse . . . that I don't dress like a doctor. It's true. I don't." Implied here is that physicians are expected to appear in a certain "stereotypical" way; perhaps for men, a jacket and tie, or for women, a conservative dress. This woman, young-looking for one in her forties, was dressed in a manner that might be described as "funky"--a purple and turquoise outfit, with plastic shoes and "glittered socks." Certainly untraditional or atypical for a physician, but a nice style for this woman, appropriate for her personality. A man also noted that he downplayed the appearance expected of a physician. Dressed all in denim with cowboy boots, and relatively long hair, he said, ". . . this is about the most I ever get dressed up. Sometimes I wear a long-sleeved shirt, but that's it. I don't need slacks or silk shirts. All I walk around in are dungarees and work shirts. . . ."

And in fact, this man carries his non-physician identity one step further. For instance, in a social situation, a party, he never

tells people he is a physician. "I tell them I am a construction worker or a free-lance writer, or a waiter, or a cowboy." Because, he explains, invariably the conversation would turn to medicine. "I can understand people being fascinated by medicine . . . but it doesn't give people a chance to know me. Also, I don't like the fact that it makes what I have to say more important. I think that physicians have this misplaced identity that people have given them that just because they're doctors they're more important than other people. "I know it sounds conceited," he adds, "but it's a burden people put on us."

Another respondent, caught in the same struggle to maintain his identity as a person, rather than primarily a physician, takes a different view. He attributes the responsibility for one's identity as a physician to the demands of the profession:

I generally tried not to base my own self-image within my professional sphere. I have tried not to define my happiness based on what I am doing as a job. That influences my overall state, but I really think of myself primarily as a person trying to do a lot of things and one of them happens to be my job. Not that I am a psychiatrist. I happen to do psychiatry. [25]

But he feels himself becoming "socialized into the medical profession--the psychiatric profession--much more than I would like to. I am aware of myself as a doctor, which I was never really aware of myself as in my other roles. I was clearly able to divorce myself from being a chemical engineer."

The very nature of his work and responsibility make it increasingly difficult to maintain a separate identity:

. . . It's hard to go home and not continue to take some of the anxiety and concern home with me. Somebody that comes into the emergency room tells me he's hearing voices to kill other people, and that I come to an assessment that that's not really what's happening with him and send him out. And I go home and I can't forget the fact that there's somebody walking the streets that

has told me he's going to go out and kill people. So, it intrudes a lot on my personal life and by virtue of its intrusion helps to form my own self-identity. I try to fight that process because I really don't want to have my core as my job, but it's some struggle, always a struggle.

In addition to the external symbols of one's professional identity, which physicians attempt to control, a more basic solution--and one which gets at the root of the problem just described--is to try to limit one's practice--in terms of hours and demands, but not at the expense of one's commitment.

One woman described how her feelings about medicine as a profession have begun to change in the few short years since she first thought about it, to the present, as a second-year student:

It seems that the more I see, the more skeptical I become. . . . The profession is much more limited in terms of time--the commitment that one has to give to your studies. I see medicine as a lifetime commitment to being a student. . . . It seems like it is all-consuming. . . . I have a difficult time limiting how much I study . . . putting limits on what it is I want to learn. And, I see the dangers of going into a profession which is sort of demanding to begin with. . . . I see that at some point, I'm going to have to limit the scope of my action. At some point, to have a life of my own. [21]

This second-year student approaches her studies in much the same way those now in training did when they were students, if we recall their comments in Chapter 5. That is, they took a pragmatic attitude, by setting limits on the amount they studied and the grades they achieved. Similarly, our respondents expect to approach the practice of medicine with these same limits, once their training is completed. It is virtually impossible to set limits on their duties and responsibilities, now, while in residency training, however. Here, they are part of a system which expects and demands one's total commitment and devotion. That is not to say they accept this type of "apprenticeship."

On the contrary, they resent it and doubt its relevance to their future. (This has been discussed in Chapter 5.) But, as practicing physicians on their own, and to whatever extent possible within the confines of their training, they intend to view medicine as a chosen career, as one part of their lives, rather than as all-encompassing.

One woman feels that it is "healthy" rather than "negative" that she doesn't "want to work one hundred hours a week, and that she wants to have an integrated life, with many interests."

Perhaps the issue of "self-identity" is more acute for the older recruits into medicine. After all, they have had broad and diverse experiences prior to the pursuit of medicine--and so their identity as a person, a well-rounded person, somewhat firmly entrenched. And they must fight to keep it. Whereas the typical recruit, who makes a commitment to medicine as early as age sixteen, and travels a narrow and rigid path thereafter, is able to form only the identity of "physician," never having had an opportunity to explore other interests and concerns. (The reader is referred to the quote by Myckalyn, Chapter 2, page 21 which aptly describes this.)

Patients

The preceding section has described some of the concerns and ambivalence physicians share regarding the medical profession. A few chose it and pursued it aware of its shortcomings and, in part, did so deliberately with the hope of changing it. They were "political" or "activist" in their approach to medicine as a career. And, more often than not, they became disillusioned with the grandiose impact they hoped they might have.

Those who are most frustrated recognize that one cannot always separate medical problems and disease from the social environment. One woman, despite her personal commitment to "social medicine," feels that few other physicians see medicine as a "service profession." Rather, they focus on "the individual relationship between the doctor and patient." But "the social obligation" is not perceived as being very important. For instance, "You're obligated to treat a kid for a rat bite, but the fact that you're sending him back to the same building, the same tenement full of rats, rolls off [doctors'] backs. They pay no attention to that."

Yet, the responsibility of the physician remains unclear to those others who are equally aware of the social concerns. One resident in psychiatry agrees that "the whole medical establishment is horrendous" in that it "hasn't addressed itself" to these issues, by "preventive medicine or to working in teams" rather than placing the physician in the role of being the "save all of what goes on":

I think the problem with medicine is that people are so incredibly needy, and when you see the need out there, it's so incredibly painful. Needy in millions of ways and many times the doctor is expected to solve things that are really coming from sociological backgrounds. . . . These people are not [in the emergency room at 2 AM, with a child who has a cold] because of their disease. There's no heating in the building. Because they're poor. They have battling husbands and wives and horrible conditions. And they come to the hospital thinking we can actually do it. [47]

Still another physician talks about this, rather poetically:

You have a lot of people who are abused by society, really victims of oppression. . . . This oppression is global--their neighborhood, their youth, their history, their employers, their air, their noise, their habits, acculturation. And, they come in train wrecks, train wrecks with the ravages of their existence written upon them. You patch them up, if you can, but you send them out to the same environment that got them sick in the first place. You really don't have any expectation of changing the environment. You're basically just turning them around, pointing them on,

giving them a little push and saying, back you go. And you know they're going to be victims once again. It's a very sad thing. [17]

There are others who, though they do not talk about their commitment as a physician to society's ills, are nonetheless concerned about the medical profession and its role in society. Yet, they focus on the more manageable aspects of being a physician, the relationship between the individual patient and the practitioner.

That is, they see as their unique contribution to the profession and to society, their individual relationship with the patient. Above all else, it is that which gives our respondents the most satisfaction from medicine, as expressed one way or another: "working with patients," "personal contact," "dealing with people," "the person-to-person contact."

For some, within this relationship, there is emphasis placed on "helping" people who are sick, or "saving" them. The idea that, as physicians, they are "able to do something about it" and, then, "to see someone get well."

Yet, this role is not without its "frustration and anxiety." Sometimes the desire and skill to help are not enough. In the face of certain illness, physicians, too, are helpless. And this is a difficult cross to bear.

One physician, who just completed his internal medicine residency, comments on this:

You see things you're really unable to affect. Somebody comes in ill, and there is very little you can do for this person. Very little. Still, in 1980, very little you can do to help this person. And you know the consequences of his disease better than he does. And it's really sad, sometimes. [17]

The extent to which this man felt this frustration is illustrated by

his request to the interviewer: "If you have a couple of minutes, really, I'd want to talk a little bit about this."

For one physician, in particular, a general practitioner, his role as helper went beyond the purely medical realm: "Even with patients for whom you realize there is nothing you can do--that are terminally ill, I think you can help them in other ways," he explains:

I have had people that were referred to me that had terminal cancer. Everybody knew that there was nothing that could be done and yet they referred them to me as a family physician because they felt they needed on-going care. And, there is a tremendous amount of satisfaction for me just to ease their suffering. And, the family's emotional suffering. I have a really nice relationship with these people. And it's a great satisfaction. [24]

Even in a less extreme situation, when clearly the physician can intervene medically, the satisfaction for some physicians is based on the interpersonal relationship--as person to person, rather than in the more specific relationship of doctor to patient. One woman, who just completed her training in "social medicine," explains:

. . . what really interests me are the people. Not so much the diseases. It's fascinating when you talk to someone who's in internal medicine, they can often remember almost every patient they've taken care of and they remember them by diseases. I can remember almost every patient I've taken care of, and I remember them by what they were like as people, and what they did, and what their interests were. I can never remember why they were in the hospital. So, that personal interaction really fascinates me. [10]

Perhaps midway between the physician who is most gratified by making a sick person well and the one who is gratified more so by the purely interpersonal components of the doctor-patient relationship, is the physician who focuses on treating the illness and the person. Here we have the physician, for instance, who "gets pleasure communicating successfully with someone who comes with a problem. . . ." Specifically, this entails "making people comfortable in an uncomfortable situation," according to the respondent, who currently works in a women's

prison. "I get a lot of satisfaction out of . . . explaining to them exactly what I am doing, instead of just doing it, teaching them more about their body and how it works, making them unfreaked out by something they might have, and sort of seeing them look a little less anxious than when they came in."

But, in reality, "that doesn't always happen, of course," admits this respondent. And sometimes it's very frustrating and you can't get anywhere. That will keep me hooked forever!"

A second respondent's attitude is particularly interesting, since she was initially reluctant to pursue medicine because, as a scientist by training, she felt unsure about dealing with people. Yet, as a resident in obstetrics-gynecology, she seems to thrive on her relationship with patients. She especially likes to deal with a patient who is "anxious, uptight, and in some kind of distress--even if not very severe, and being able to talk with the person, to elicit some information and at the same time, try to get the person to relax a little, to open up a little, to be a little more comfortable." "And then what I try to do," she explains, "is to elicit the patient's understanding and cooperation in understanding the problem and solving the problem. . . . Plus, where it's possible, to educate the patients. And, if you can get . . . something out of the encounter while you're treating them, it's marvelous."

But the task is not an easy one, for the former respondent or this one. She agrees that such a relationship "doesn't happen all the time. There are people that I can't do it with either because I'm ignorant, or because we don't communicate well, or whatever."

Nevertheless, they try. According to a pediatric resident there

is a need to provide "better contact, better individualization, personalization of patient care."

From the preceding discussion we sense that medicine as a profession, despite its shortcomings, provides our respondents with much gratification. They have clear and specific notions both of what they expect from the practice of medicine and what they, in turn, can provide. What we can glean from their comments is a commitment to delivering care in a "humanistic" and "patient-centered" manner. This was perhaps even more apparent to the interviewer than to the reader, by virtue of having had personal, face-to-face interaction with these physicians. From their voices and facial expressions, and from seeing them function within their work setting, the interviewer was struck by their sense of devotion to the profession.

The Implications of a Late Start into Medicine

While we have not directly attempted to compare our older recruits with their younger peers in terms of their personal qualities as physicians, the suggestion here has been that in some ways they differ. In their approach to the profession, and to patients, they seem to fill a role that, with today's emphasis on technology, specialization, and the bureaucratization of health care, has been increasingly more absent. And that role is one of the "generalist," or "family doctor."

But the critical factor here is that this role is expected not only of those who are, in fact, general practitioners. Our respondents see it as a requisite for the superspecialist as well. There is a set of values or attitudes which all physicians must have, regardless of their chosen specialty. And thus, according to our respondents, all

physicians should incorporate into the practice of medicine the attributes typically associated with the traditional image of the general practitioners. In essence, the qualities that make a physician "a good physician" are the very same qualities that "make a good family practitioner--the old fashioned thing that we went so far away from."

What are these qualities? Above all, according to the number of references made, is "caring" about people. This goes hand in hand with "kindness," "sincerity," and "warmth." More specifically, a physician must "spend time with patients." But this time must be spent in a meaningful way--"talking to the patient, not at the patient."

[Emphasis by respondent] The emphasis, therefore, is on "communication"--"hearing" or "listening" to what the "patient wants" and the patient's side of what he "is going through." And the physician must "be open," "give of" himself, that is, "to be able to communicate that you care."

And all this must be in a "non-judgmental" way--"without prejudice of any kind." This requires "humility" and lack of "arrogance," above all, according to respondents.

The physician must treat patients "as human beings," first and foremost; not "as cases, but as people in need of help." "The ability to see the patient as a whole, rather than a collection of symptoms," is stressed. The emphasis here is on "empathy," the second most referred-to term. "I know that sounds really trite," said one respondent, "but I think that the ability to put yourself in the other person's place and see how they might be feeling and might be reacting to you and to their situation is the most important thing." And this relates back to the concern about being able to communicate with the patient.

In essence, what our respondents believe to be qualities that make a "good physician" are those that "make a good human being," so aptly put by one physician.

And these qualities seem to have been lost in more recent years, according to those we talked with. One woman, a former nurse now in internal medicine, feels physicians should not use the "1979 standard" to model their behavior. And she summarizes much of what has been described above:

[Physicians of years ago] seemed less frustrated with their profession. . . . They seemed to have had time to interact with the patient and the families . . . and it felt to me when I compared what we [in 1979] were doing was that often you give an explanation to a patient that is a little too quick. You refer to families as harassing you--they are always on my back, they want to know what is going on. So, I felt that the way it was practiced a long time ago somehow had a nicer style. [5]

The "Good" Physician: Special Attributes of the Older Recruit

In our discussion of what constitutes a "good physician," from the point of view of our respondents, we must remind the reader that our interview sample is relatively small, and it is comprised of only older recruits. Consequently, we cannot suggest that all older recruits value and possess these qualities; nor can we suggest that among all younger recruits such qualities are absent. But perhaps what is most relevant here is the way in which our respondents compare themselves with their younger peers. Clearly, they feel they have special qualities as physicians which can be attributed to the advanced age at which they entered the profession.

As they describe the particular importance of caring, and empathy, in dealing with patients, they place as secondary the significance of "intelligence" or "how much you know." Certainly one must be

"reasonably bright," but more than that is the need to be "disciplined," to "persevere," and "to know one's limitations."

"The world is full of reasonably bright" people, said one respondent. But they are not necessarily "the people who would make the best physicians." And our respondents are critical of the emphasis placed by medical schools on "the academic" credentials of applicants:

The profession perpetuates some of the wrong people being in medicine. The people they take are people who got extremely high grades and did nothing else but study a limited number of subjects in premedical school. I saw these people among my classmates, and they make very poor physicians. They may be OK working in laboratories, but they are incredibly immature socially. Competitive. They cheat. They don't belong in a helping profession. [48]

Respondents agree that intelligence is needed. "But I don't think intelligence is a prime factor," said one respondent, a resident in plastic surgery:

I think that to be a doctor, it takes, number one, a lot of hard work; perseverance, and a tremendous dedication. A tremendous sense of responsibility. I stress the point responsibility because you are assuming responsibility for life. . . . So for people who go into medicine and don't have this, I don't care how bright they are and how talented they are--I mean, there are interns that won't wake up in the middle of the night because they can't assume responsibility. Patients die because an intern is too lazy to get up! . . . I think sympathy and empathy for the patient--if you don't relate to people, if you don't feel for the patient, I don't care again how talented you are or how bright you are, I don't think you have a role in medicine. That's what it's all about, because when you care, then you're going to do the extra--you're going to get up at night. [39]

But, regrettably, according to this respondent and some others, medical schools focus on the "academically able who are the least interested in the human aspects, the service aspects of medicine." In fact, ironically, according to one respondent, those who "set the admissions standards" are "the people who sit on the academic ladder and never get out and walk the wards and never deal with the patients on a one-to-one basis."

The emphases in medical school on "memorization" or "manual dexterity" are important" but "can be learned" or developed. The consensus among many older respondents is that with discipline and perseverance, one can master those traits. The "one thing that medical school cannot teach you--that you have to be born with," is "compassion," according to one respondent. "That's at the top of the list--you've got to be warm . . . empathetic," he said. With regard to whether such qualities are learned or acquired, another respondent takes a less extreme position, but his bias is clear. "I think a physician or anyone can be trained to modulate or buffer his or her manner, but the actual caring or actual sincerity--I don't think you can find a good actor, a good put-on artist."

And it is in this arena--in the interpersonal aspects of patient care--that older recruits believe they have an edge over the more typical younger recruits.

What is it that age brings to the pursuit and practice of medicine?

"Maturity"

"Maturity" was a word used over and over again by our respondents. Though not impossible in someone young, and not necessarily evident in all who are older, it was nevertheless perceived to be a function of advanced years and the experiences gained in that time. "There really is no substitute for experience," according to one woman in particular. "Not that everyone is capable of learning from experience, but you certainly can't learn without it."

And the traditional route through medical school and medical

training prevents one from "maturing." In part because of the early age at which one begins, one cannot be expected to have many life experiences:

If you start [medical school] let's say at twenty-one, you have never lived yet--except the kind of living you do at college, which is sometimes significant, but in the case of the premed student, it isn't. [33]

The limited experience, due to youth, is compounded by the restrictive nature of the medical education and training process. It is described as "its own packaged environment which has very little relationship to what goes on anyplace else outside of the school," by one respondent:

. . . That's ten or twelve years of really hard-driving, mechanical competitive work with long hours. And really a drain or a closing off of certain emotional parts of you. [33]

Traditional recruits often suffer from "developmental delay," according to the observations of one respondent; she qualifies this by saying it's "not a categorical criticism." Yet she feels "a lot of people get on a track and end up at the end of the residency acutely dissatisfied with their personal identity. I mean, I feel they don't have one yet."

"Stability"

Those we interviewed feel that compared with many of their younger peers "they are more sure of what they want." I feel like at this point, I am sort of ready to settle down in a career," said one woman, a second-year medical student in her thirties. "I feel like the last ten years I've done what I wanted. And, I could not have done that as easily after becoming a doctor, as I have. So, I think just going straight into medicine from college, I think you miss a lot of living.

I think you get a distorted view," she said. So, in contrast to the attitude of many admissions committees that older recruits, because they have done other things, are inherently unstable in their choice of medicine, our respondents accept the opposite view. One respondent said: "I see a lot of the younger students doubting themselves. Is this really what I want to do?" whereas "older students have thought about [medicine] very carefully before they have chosen it."

Among the younger students are a recognizable group, perhaps small in number, who are in medical school because "their parents wanted them to be there." They are there "because of other people's expectations," claim the older recruits.

One respondent compared himself to his college friends who went directly to medical school after college, "who had always wanted to be docs," he said. Yet, now that they are in practice, "they are really going through a crisis of whether medicine was really what it was cracked up to be. In other words, they didn't even stop to think about that beforehand." This respondent points out that their reasons for choosing medicine in the first place were inappropriate. "They thought it was the thing to do or their parents thought it was the thing to do. And now they are thirty to thirty-five, and they are really disillusioned."

On the other hand, our respondents feel a later decision is more "stable," "realistic." "I think we have less illusions about medicine," said one respondent. Another, a woman who studied music, social work, and worked in a hospital as a case aide and researcher in epidemiology, feels that "having done other things" provides an "advantage" in that it gives one a "perspective that there are various possible things and that

this is what I would enjoy most."

The "interim time" between college and medical school, ranging anywhere from a few years to more than ten, "puts you into a totally different frame of mind," according to one older recruit. It forces you to "look into what you are doing in medicine": "Are you doing this for the money? Are you doing this for the power? Are you doing this for the prestige? You've worn off a lot of adolescent fantasies about all of this."

For the women who waited, there was a different type of introspection which occurred. "By the time I did go into medicine," said one, "I had done a lot of thinking about being a woman and being a woman professional."

Hence, older matriculants believe that they are more secure in their choice of medicine as a career. And this in turn enables them to deal with many of the demands placed upon them, first as students, and then as practicing physicians.

"Perseverance"

The training experience was, in many ways, easier to bear as an older student, in spite of the prevailing attitude among many in the profession that age reduces one's stamina--both mental and physical. Our respondents felt that being older provided them with a "more realistic attitude," "a perspective," that allowed them to persevere even in the face of extreme hardship. In comparing himself with younger colleagues, a surgical resident said: "I have more discipline. The younger people cannot take this type of training. Surgical training programs are very demanding. They drop out of these programs." During

his internship year at a specialized orthopedic hospital in New York City, he said that he was the only one who remained in surgery. "Everyone moved into different specialties, pediatrics, radiology, pathology," he explained. As one gets older, one learns that "life doesn't entail sitting back and waiting for what's coming to you. You have to go out and get it and do it," said another respondent. This kind of attitude "makes up whatever energy physically one doesn't have," said another. In other words, "by intellectualizing the whole thing, one can say, hey, look. This is what I want, and if necessary, I can survive."

Some feel that had they entered medical school at the typical age, they could not have been successful. One of the older respondents, a former police detective, said: "I would have been booted out!" They describe themselves at that time as "undirected," "immature," "restless," "distracted," "unresponsive," and "self-centered"--all attributes which might have prevented them from persevering when the demands became too much.

When they finally decided upon medicine, they were ready, "mentally and mature-wise," said one respondent. This is further stated by one of the medical students we talked with:

. . . Now I am looking for the challenge that I didn't want when I was in college. I'm ready to go for it now, and before, I wasn't. I think it's been a growth process and that it was needed. I don't think I would have been successful if I had gone straight out of college to medical school. [Why not?] I don't think I had the ego strength. . . . [13]

While this growth process may not be necessary for all who enter medicine, our respondents, based on firsthand observation, found that their younger peers were unable to cope with many of the pressures of

medical school and postgraduate training, physically as well as emotionally. "It seems to me a lot of the older students and housestaff have the most energy and are the best in terms of working hard and doing what they are supposed to do," said one.

It is not "age" per se which relates to energy level, but rather "more of a sense of responsibility," according to this respondent. "I think the fact that I had been working and had people working for me probably made it a little easier to assume a position of responsibility and authority, and to be a little more sure of myself," said another.

Older individuals, because of their previous experiences, seem to be more tolerant of the stress of the training period. "They don't get upset that easily. . . . After you've seen quite a lot and done quite a lot, I don't know if you get upset as much," explained one woman. "I tended to get less wrapped up in the little things," said another. This applies to fairly mundane issues, such as "complaining about a bad teacher," as well as to the more emotional issues pertaining to sickness and death.

"Empathy"

Certainly beginning in medical school and postgraduate training and continuing throughout one's professional career, the physician will spend most of his time dealing with patients on a one-to-one basis. If we recall, among the prime indicators of a "good physician, as exemplified by our respondents, were the ability to be "caring" and "empathetic." And there was a sense that one cannot necessarily be trained during medical school to acquire these traits, especially within the

context of so demanding a training period.

The stereotypical students who have gone "from home," "taken care of my their mommies," then to high school and college, rarely have a chance to experience any of the things they will be called upon to deal with as physicians. "They never know what it's like on the outside." "They have never been out in the world with people." These are typical of the comments made by older students. While the younger recruit may excel in the basic sciences, our respondents feel that as older recruits, they clearly have an advantage in terms of dealing with patients. One respondent explains: "I think the person I had become by the time I got to medical school makes me the kind of doctor I am now. It gives me the strength the younger doctors don't have. Mostly the experience of having not been successful--of having a failed marriage, having delayed my career, and being behind everybody else . . . those experiences gave me a compassion for other people not being perfect. . . ." She feels that these have been "lessons in humility."

Another respondent has learned a similar lesson. "I think being older has given me a perspective. . . . I've done my share of low-life menial work and I've been out in the real world. It changes you. Makes you understand people a little bit better." More specifically, "experience," or "exposure" to "life," "life situations," enables one to deal with the whole range of problems presented by patients, with "sickness" being only one part:

The things that patients need to have dealt with are the things that have to do with their dying, or what happens to their families, or sexuality . . . the kinds of things Ann Landers says your physician is going to help you with. [7]

And this life experience prepares one for the kinds of patients to be encountered:

You have to see a kid go up to a bum who has been laying on the street, to a narcotics addict, somebody who has been raped--to be able to relate to somebody at such an incredible time and be twenty-two years old and have done nothing but go through school your whole life and live in a [nice] house and grow up with nice boys and girls. . . . All of a sudden, you are thrust in the middle of all this--to see people blown away, dying, and lying in incredible pain. . . . [12]

Related to this is the ability to deal with such patients in a non-judgmental way. "I just see an awful lot of young doctors with great contempt for their patients, and that doesn't help at all," said one respondent. "I don't hate junkies. I'm not angry at people who abuse themselves and therefore are sick," said another, in comparing herself to her younger classmates in medical school. The older respondents feel they have learned "humility" and have acquired "maturity," which help them in these situations.

And, finally, older recruits feel that they are better able to communicate with patients and their families, because they have had exposure to many people in different settings in their lifetime:

[Younger students] have never had a serious thought and all of a sudden they are in an emergency room and they have to tell some lady her son just died in a car crash. . . . They don't have any personal resources for dealing with that. Not that it is easy for anybody. But you start to see all sorts of life situations, and they never had any experience with any life situations. [11]

Clearly, our respondents feel that in the domain of direct patient care they have the advantage over the younger recruits, who, on the other hand, may be better at memorizing, studying, and doing the basic science work. But they recognize at the same time that not all older recruits have benefitted from their experiences prior to medical school, nor have all younger recruits been denied the opportunity to mature. And, that age and experience do not guarantee a "good physician." But, all things considered, as we reflect on the compelling

evidence offered by our respondents for the benefit of having delayed medical studies, it becomes difficult to deny the unique contribution of the older recruit with particular regard to direct patient care. And if we couple that with the more objective aspects of their physician behavior, that is, specialty choice and practice arrangement, then the unique contribution of the older recruit is twofold.

The following chapter will attempt to summarize the similarities and differences between those who pursue medicine at the typical age and those who wait. As we approach the conclusion of this paper, the reader may wish to consider the implications of this research for current recruitment and selection procedures for entrance into the medical profession. If we agree that older recruits do make a contribution to our society's manpower needs, both in terms of their practice characteristics and behavior as physicians, then perhaps medical schools would be well-advised to more actively recruit and select from this special population. And, if they are not significantly different from the typical recruits, then at least comparable patterns of recruitment and selection should be provided.

Chapter 10

Summary and Discussion

This research has been concerned with a small proportion of the medical profession, the five percent who have begun their medical training at an older age, twenty-eight or later. Our basic question has been: Do those who delay entrance into the medical profession make a contribution to our system of health care delivery that is not being met by other physicians? More specifically: When compared with those who begin their medical studies at the typical age (younger than twenty-eight), do they fill the need for more primary care physicians (in particular, general or family practitioners)? Do they practice in the underserved rural and inner city areas? And, do they deal with patients in a more humanistic or socially concerned way?

To answer these questions, we relied on two sources of data:

- Survey data from a sample of physicians (n=4143) randomly selected from the AMA Physician Masterfile, which included "younger matriculants" (those who begin medical school before age twenty-eight) and "older matriculants" (those who begin at age twenty-eight or later). This sample includes mostly physicians who are in practice, but has a fair number of those in training, as well.
- In-depth interviews with a sample of older matriculants, selected non-randomly, primarily from one New York City

Housestaff association. Also included were physicians in practice, as well as those at the premedical and medical school stage of their training.

The combination of data, the first, more quantitative (using secondary analysis of a computerized data base), and the second, more qualitative (using content analysis of transcribed interviews), allowed us to both describe the older recruit and to compare him with his younger peers. More specifically, we examined career paths and patterns with regard to the following:

- the decision to pursue medicine in light of earlier career goals and choices,
- the nature of undergraduate and postgraduate training (location, type, quality or program),
- practice characteristics (location, specialty versus general practice, practice arrangement),
- attitudes toward the profession and professional responsibilities.

Overall, we found that younger and older matriculants differ in some important ways; but they are alike in many respects, also. The nature of their differences and similarities will be presented in Chart 3, which follows.

Relevance and Implications of this Research

In the eight years since this research was initially conceived (1973), and in the three years since it was implemented (1979), the issue of age as a variable to be considered in the recruitment and selection of physicians has taken on new meaning.

First, we have witnessed a slight but steady increase in the

Chart 3

Older and Younger Matriculants Compared: Summary Data

	<u>Younger</u>	<u>Older</u>
<u>Background</u>		
Socioeconomic status	Upper-class; upper middle class ^c	Middle-class; lower middle/working class
First thought about medicine	Childhood or adolescence ^c	Young adulthood or adulthood ^b
Definitely decided to pursue medicine	During college or before ^c	After college or graduate school ^b
<u>Premedical education</u>		
Major (college)	Biology; premed ^c	Social science; humanities; some science ^b
Performance (college)	High grade point average ^c	Average ^b
Graduate school/degree (Masters, doctoral)	15 percent ^c (approximately)	one-third ^b
Work experience	Part-time during high school and college ^c	Full-time after college as well as part-time or full-time during college ^b
<u>Medical Education and Training</u>		
Type of school		
United States	Nine out of ten ^a	Eight out of ten ^a
Private	About half ^a	About half ^a
Higher quality	More than half ^a	Two-fifths ^a

	<u>Younger</u>	<u>Older</u>
<u>Medical Education and Training (continued)</u>		
Married (at time of application)	15 percent ^c	More than 40 percent ^b
Performance	Emphasis on high performance ^c	Emphasis on being average ^b
<u>Medical Career</u>		
Specialty		
General/Family	One-tenth ^a	One-fourth ^a
Location		
Urban	Predominantly ^a	Predominantly ^a
Practice		
Solo	20 percent ^a	30 percent ^a
Group type	40 percent ^a	28 percent ^a
Organization	37 percent ^a	35 percent ^a

^aBased on AMA data

^bBased on interview data

^cBased on existing literature

proportion of those age twenty-eight or older who apply to medical school. For the 1973-74 entering class, they represented 9.7 percent of all applicants; for the 1979-80 entering class, the proportion rose to 12.4 percent. Moreover, they now represent a larger proportion of entering students. Among the 1973-74 class, they accounted for 5.6 percent; among the 1979-80 class, nearly 9 percent of students. And overall, the acceptance rate of older applicants has increased from 20/4 percent to 29.8 percent during that same period (derived from data presented in

Dubé and Johnson, November 1975; AAMC, 1981). These gains are not dramatic in and of themselves. But, taken within the context of the still prevailing attitude on the part of many admissions committees, in particular, and the medical profession, in general, that older recruits are poor risks because (1) they lack the stamina to endure the rigorous training and preparation; (2) a late decision reflects instability or failure in previous endeavors; and (3) they will have too few productive years as physicians--we must view these changes as significant.

A second factor has been the increasing attention on the part of educators toward this special population of medical recruits. In recent years, a few undergraduate (non-medical) universities have taken note of the substantial numbers of individuals who aspire to a career in medicine some time after college graduation, but who lack the necessary premedical credentials. They have created special programs for older students to fill this need. Unlike most premedical programs at the undergraduate level, these are designed specifically with the college graduate in mind. Although such students may take their coursework along with the regular undergraduate students, they are provided with extensive counseling and support, first, to determine if medicine is an appropriate career choice; then, to help them plan their premedical curriculum; and finally, to aid in their selection of medical schools for application.

Probably the earliest of these programs is the Columbia University School of General Studies "Pre-med Program for Late Starters." Beginning in the 1950s, long before attention was drawn to this population of students, the Columbia program attracted hundreds of students, based primarily on its word-of-mouth reputation. Finally, in the early

1970s, university policy was changed to allow for advertising, and enrollment increased further (personal communication with program officials, 1975; New York Times, May 14, 1973). Claiming to be the "only purposeful premedical program for college graduates," it has now been joined by at least two others, one at Loyola University in Chicago (see, the Wall Street Journal, April 15, 1980) and the other at the University of Pennsylvania, called the "Post Baccalaureate Pre-Health Program" (transcript of interview with program director, provided by the Educational Testing Service, 1981).

A second type of educational program was directed toward those with an advanced degree in the sciences at the doctoral level, who wish to pursue a career in medicine. Unlike those described above, these individuals have the advantage of a premedical background. Recognizing the existence of this population, many of whom had been displaced because of economic conditions, the University of Miami School of Medicine started an M.D.-Ph.D. Program, the first of its kind in the United States. It is based on the premise that exceptionally qualified and gifted men and women could be educated in an accelerated program leading to the M.D. degree in twenty-four months or less. Originally devised in 1971 as an experiment in medical education to test the above premise as well as to explore a means for providing additional medical manpower while simultaneously alleviating a surplus of Ph.D. scientists, it has generated worldwide interest and continues to grow (Meunch et al, 1974; personal communication, 1978).

And, still a third indicator of the significance of older recruits is the recent surge of research on this population. Almost without exception, the attention has focused on women who delay the study of

medicine. Between 1981 and 1982, at least four articles appeared in the professional literature dealing with the motivations of women to pursue medicine at a later age, focusing on medical students (Kaplan, 1981, 1982), and more specifically, on nurses in medical school (Gussman, 1982). There has also been research on the career patterns of older recruits (Ward, 1981, who studied a British sample).

A second category of older matriculants which has received some attention is those with graduate degrees (Thurman, 1979, for a study of the selection of medical students in schools in the United Kingdom and Irish Republic), most notably, those with degrees in dentistry (see, Sadowsky, et al, 1976a, 1976b; Niedle, 1976; and, see Henderson, 1977-78, for a study of a British sample).

In light of the preceding discussion, our research on the career paths and patterns of those who delay entrance into the medical profession is perhaps more relevant today than it might have been five years earlier. It supports the interest and action of educators, both in the medical and non-medical arenas, toward increasing the diversity of the physician population, using age at matriculation as one possible criterion, which has implications for the choice and practice of medicine as a career. And, it expands upon the most recent research in this area in that it deals with both men and women (whom we found to differ from each other as well as from their respective younger peers); it focuses on both the decision and motivation to pursue medicine as well as the outcome and implications of that decision for the later practice of medicine; and, finally, it includes older recruits from a variety of backgrounds.

The implications of this research, discussed thus far, have

been limited to those for the medical profession. But this research may also be placed within a broader context. It raises important questions about the traditional theories of occupational choice and decision-making which have relevance for other areas as well. Historically, there has been a focus on youth and adolescence as the appropriate age for such choice (See Pavalko, 1972, for a summary of theories of occupational choice), and considerably less concern with the adult phases of the life cycle.

Society's conventional conception of career choice, particularly in relation to the professions, has long had a restricted scope. There has been the tendency to emphasize the "single-career concept," which implies that an individual should have a single lifetime occupational role identity (Sarason, 1976). The college student is not unaware of this. While he realizes that there are many things one can be, that there are many directions in which to turn, and that there are many areas to be explored, there is also the reality that one cannot pursue all options within the confines of four years of college. There are at least two factors which set limits on how one thinks about making choices. One is internal, in that a student feels he has to make a choice of only one career; the other is external, in that the college requires the student to specialize at some point to make that choice, that is, to pick a "major." Thus, the opportunity to sample and explore is reduced. From one standpoint, the student who knows when he comes to college or very early in college what he wants to be is spared the conflicts explicit in choice. But even among the early deciders, one frequently sees doubt and indecision (see, Davis, 1965). Perhaps even more troubled are those who have made a decision they realize was wrong.

Several studies during the past two decades show that about 40 percent of the working population would like to change their occupations; 18 to 19 percent are consciously dissatisfied with their jobs; and one-fourth to one-third feel their abilities are underutilized by their employers (Best, 1980). According to Wirtz (1975:10), ". . . we haven't the vaguest notion of the number of people (only that it is exceedingly large) who come someplace between the ages of 25 to 50 to a point of significant realization that they ought to be on a different career course--not just as a matter of boredom or frustration or some kind of whim, but as a calculated judgment about improving their worth to themselves and the whole system." Wirtz is typical of a series of behavioral and social scientists who, in the last decade, have attempted to explore historically, theoretically, and/or empirically, issues of adult development, with particular attention to careers. They have focused on various categories of adults, such as women (Rubin, 1979); men (Levinson, 1978); graduate students (Heistand, 1971); and professionals (Sarason, 1977). These works bring to light a number of social and historical changes, which when considered, suggest the need to reevaluate our traditional conceptions of the one life, one career concept. Some of these changes are:

- (1) Changing family patterns. The role of women in contemporary society has been changing in recent years to encourage both fuller and longer participation in the labor force, based on personal choice as well as financial need. This has been due, in part, to several factors: women are marrying later, or not at all; they are limiting the size of their families, delaying the age of first pregnancy, or

choosing not to have children at all; and, the divorce rate continues to rise;

- (2) Changes in labor market conditions. Professional areas, such as the physical sciences and all levels of teaching had exceptionally strong markets in the 1960s, but weak ones in the 1970s. Other areas, such as law, medicine, and Master's level business administration, accounting, and engineering were only moderately affected. Hence, a shift has occurred from the academic and scientific to the traditional professional and business-oriented specialties;
- (3) Changes in life expectancy. About three-fourths of all Americans now reach the age of sixty-five, compared with only 40 percent at the turn of the century (New York Times, May 7, 1978). This in part both contributes to and results from an increased concern with personal development and growth, both physical and emotional. And, it has implications for people's expectations about the passage of time, in general, and the experience of work, in particular. As more people reach age sixty-five, the typical age of retirement, and continue to remain active in the workforce until that time, it becomes more important to have a satisfying career. And, as attempts to increase the age of mandatory retirement from sixty-five to seventy take effect, career aspirations and choices at varying stages in the life cycle take on new meaning.

The renewed interest in higher education, as a consequence of these social changes, has influenced the patterns of enrollment in our

nation's schools in recent years, particularly with regard to age. For instance, during the 1970s the proportion of young people enrolled in college sharply declined, reversing an historical upward trend. Hence, the average age of students is rising. While the number of eighteen- to twenty-one-year-old students increased by about 11 percent from 1972 to 1976, the number over thirty-five rose by more than one-half. That is, the upward trend in enrollments was not uniform among all groups; it was particularly notable among those age thirty to thirty-four and thirty-five and over, who previously attended college in small numbers. In the 1970s, one-third of all students in higher education were twenty-five and older, and by 1980 the figure was approximately 40 percent (Sarason, 1976; Fiske, 1977). This increase also pertains to first-time college students over age eighteen. For 1974, 1975, and 1976 they were 20.5 percent, 21.5 percent, and 32.6 percent, respectively (U.S. Department of Health, Education, and Welfare, 1975; 1976; 1977).

The changing attitude toward education, and the number of older students beginning or returning to college, has resulted in a substantial invasion of middle-age students into professional and graduate schools, as well (see, Heistand, 1971; Freeman, 1976; Sarason, 1976; Best, 1980).

And, in addition, we have seen an increase in the number of college students who have taken a year off from their studies to travel, to work, to gain new experiences, or "to find themselves." Many colleges and universities (if only for financial reasons) have set up their own "year abroad" programs. Among the students' reasons for this interlude are boredom, or unwillingness or inability to make a career commitment. And, among those who do not take such time off during

their college years are those who take it between graduate from college and entrance to graduate or professional school, or before beginning work. According to a report in the New York Times (Maeroff, 1978:A1), "The trend toward 'stopping out' that developed in the late 1960's and early 1970's when so many undergraduates took leaves of absence for a semester or two, has helped create a climate in which it is now acceptable to defer advanced studies" (see also, Hechinger, 1971). Both students and educators share the opinion that students will get more out of their graduate work if they take the time to mature after completing their undergraduate degrees. Further, they will be able to make better informed decisions about what to study at the Master's or doctoral level. These changes are found on campuses throughout the country. (See Wirtz, 1975, for a proposed plan to integrate work and education.)

The growing trend toward delayed or interrupted undergraduate education as well as toward mid-life career change is bound to have implications for the profession of medicine, since some of these individuals are likely to aspire to a career in medicine, as we have seen among our own respondents.

And, in its broadest sense, this research will contribute to our knowledge on work and occupations in areas other than medicine. By specifically focusing on one group of individuals who get a late start into their chosen career, namely medicine, the traditional theories of occupational choice and career development can be reevaluated, to include the adult phase of the life cycle.

Notes

¹While some American medical schools seem to be changing their admissions criteria to accommodate more older applicants (see Peterson, 1977; Maeroff, 1978), there still is ambivalence about their acceptance (see the editorial by the Vice President of the AAMC, Dr. Sherman, 1978). The most favorable attitude toward older medical students occurs abroad, notably in England (see, Hart, 1974; Thurman, 1979; Lockhart, 1981) and in Sweden (see Strom, 1977).

Appendix I
Interview Guide

Premedical training and experience

High school (years)

School

Location

Curriculum

- most favored / least favored subjects
- best performance / worst performance

Extracurricular activities

- social (clubs, sports, etc.)
- political (anti-war, environmental issues, etc.)
- academic (honors programs)
- religious

Career goals

Employment

College (undergraduate)

School(s)

Years

Curriculum

- major / minor
- preferred major / minor

Extracurricular activities

- social (sorority, fraternity)

- political (anti-war, environmental issues, etc.)
- academic (student government, honors)
- religious

Career goals

Employment

Graduate school(s)

School(s)

Years

Area of study

Career goals

Employment history (after school)

List chronologically from first to most recent--
describe duties, salary, reason for leaving, satisfaction / dissatisfaction with job, etc.

Did you see employment at this time in terms of a career or as a temporary situation?

Do you recall when you first thought about working or having a career? (adolescence; college; after college)

What did you think about in terms of a career?

Medicine as a career choice

When did you first think about medicine as a career?

Whose idea was it originally?

Why medicine?

- What appealed to you?
- What didn't appeal to you?
- What were the circumstances surrounding this decision?

When did you definitely decide upon medicine?

Were you also seriously considering any other occupation or profession at this time?

Was there any person / experience that you can think of as being particularly influential at this time?

- Mother
- Father
- Other relatives
- Friends--not in medicine
- Friends--in medicine
- Medical students
- Teachers
- Books, movies, plays
- Illness--of self, other
- Women's movement

Had your feelings about medicine as a career for you changed in any way from the time you first thought about it until the time you definitely decided upon it?

What steps were taken once you seriously decided to pursue it?

- Discussions with others
- Additional coursework
- Exams
- Other

What were some of the reactions of others to your decision?

Did these reactions influence you in any way?

Application to medical school

What schools did you apply to?

On what basis did you select them?

First choice? Last choice?

Others you would have liked to apply to?

How confident were you that you would gain admission to medical school?

- To school of first choice?
- To any school?

To which schools were you accepted?

By which schools were you rejected?

- Reasons?
- Reapply?

Any experiences or incidents during application process?

Interviews?

How long did it take for the whole process of applying and getting accepted?

Alternate plans if not accepted?

Did you feel there was any other career that could satisfy you?

Thoughts about medical school

Long years

Study

Finances

Relations with students

Relations with faculty

Effect on family / personal life

Medical school attended

School

Years

Curriculum

Expectation versus reality

What were some of the adjustments you had to make as a medical student?

- Study habits
- Peer relations (old friends / new friends)
- Faculty relations
- Financial situation
- Personal situation / family
- Other

Were there any changes in your feelings about medical school as the years progressed?

Which phase of medical school do you think was most important for your later career in medicine? Least important?

- Most difficult? Least difficult?
- Favorite? Least favorite?

In general, how was your academic performance?

How did you compare with other students?

What was your frame of reference in evaluating yourself?

- Self
- Faculty
- Peers

To what extent were you concerned about your performance as it compared with others?

In general, were students competitive? Cooperative? Examples.

Any cliques? Basis for formation?

How much time spent studying in typical day?

Other activities (hobbies, leisure, etc.)?

Organizational affiliations, etc.?

- Social
- Political

- Religious
- Academic

General feelings about the medical school experience.

Might it have been different at another school? Better?
Worse?

Current Situation

What are you doing now?

If residency, describe:

- Hospital (rotations)
- Program
- Years (PGY level)

How did you decide upon

- When did you first think about _____ as an area of medicine?
- When did you definitely decide?
- What were some of the factors that influenced your decision?

What, in particular, appeals to you about _____?

What, if anything, doesn't appeal to you?

Had you considered any other fields? Which?

What made you select _____ rather than these others?

If you had to make another choice at this time, what would it be? Why?

Which field of medicine do you least like? Why?

How did you go about applying for your current position?

- Matching plan
- Other
- Interviews

Was it a competitive situation? Pyramid system?

Why did _____ hospital/program select you as a candidate?

Why did you select this particular hospital/program?

Were you seriously considering any others?

What factors were important to you in making your decision?

- Geographic location of hospital
- Type of hospital
- Staff / faculty
- Special feature of program
- Other

Describe your duties. Typical day?

How do you feel about the residency program?

- Hours
- Program
- Colleagues
- Patients
- Expectation versus reality

Professional activities

- Journals
- Meetings
- Courses
- Local membership in associations
- National membership
- CIR - member / strikes / opinion

Future

How much have you thought about the kind of medical career you would like to have when you finish your training?

What would be the ideal situation as far as you are concerned?

- Location
- Practice arrangement
- Hours
- Patient population
- Income
- Other

What do you expect for yourself as compared with this ideal situation?

Have you considered teaching? Research?

Do you feel that your professional activities will change over the years in any way?

- Relocate
- Change specialty
- Hours
- Practice arrangement
- Other

Any definite plans for when you finish your residency?

If not, when will you start to make plans? What is involved?

Do you plan to become board certified? When?

Medicine as a profession

In general, how do you feel about being a physician?

What gives you the most satisfaction? the least satisfaction?

What do you think accounts for this?

How do you deal with the negative aspects?

There is a lot being said about the qualities that make a "good" doctor. What do you think is important?

- Appearance
- Personality

- Dedication to medicine
- Intelligence
- Scientific curiosity
- Integrity
- Research ability
- What is most important for you personally?

Do you remember when you first started working with patients?
How did you feel?

Have you changes? How did these changes come about?

When did you first come to think of yourself as a doctor? How
did this come about?

Medicine as a career choice--retrospect

Have you ever worried that you might not be happy in a medical
career?

If, after all, you had not been able to go to medical school,
what path do you think your life would have taken?

What part or aspect of your life thus far has had the most sig-
nificant impact for you in terms of your career as a physician?
Positive? Negative?

Age

Did your age have a bearing on your decision to think about
medicine as a possible career for you?

What about during the process of actually pursuing it?

Were you aware of the attitude of some medical schools toward
older applicants?

- Productivity
- Rigor of medical school
- Instability of applicant

Were you aware of actual admissions statistics?

Did you anticipate a problem?

Did you foresee any advantages to being older?

Any experiences during the application process related to your age?

Do you feel that you were denied admission to any school because of it?

- Do you see this as discrimination, in the legal sense?
- Are you aware of any lawsuits?
- How do you feel about the legal implications? Would you, or had you considered suing for age discrimination?

What were some of the reactions of others regarding your age, when you decided to pursue medicine as a career? What about when you actually acted on this decision?

Did your age made a difference--in any way--during any of the phases of your career thus far? In your feelings, etc.? Others?

Do you think it will make a difference in the future?

What are the advantages of being older? Disadvantages?

Do you think you were accepted to medical school because of your age or in spite of it?

Personal

Background

Born: year; state

Family composition: parents; siblings

Father's education, occupation

Mother's education, occupation

Siblings' education, occupation

Current

Marital status / history

Children

Spouse's education, occupation; current / previous marriage

Plans for marriage

Plans for children

Leisure activities

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