

Factors Influencing Family Practice Residency Selection: A National Survey

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The changes in family practice residency selection from 1978 to 1981 were studied by means of a questionnaire, and selection of family practice residency was identified by region. The relationship between the administrative status of family practice (department, division, or no formal unit) and selection of family practice residency was studied, and the opinions of medical school faculty respondents were sought concerning why interest in family practice has increased (or decreased) at their institution. The average percentage of graduates selecting family practice residency varies by region. Schools with stronger institutional commitment to family practice, as evidenced by departmental status, have a higher percentage of graduates entering family practice. Respondents felt that the presence or absence of student contact with family practice was the most important reason for changes seen in residency choice.

The dramatic annual increases in enrollment in family practice residencies that occurred in the early 1970s have subsided.¹⁻⁵ A survey was conducted by questionnaire to all 135 medical schools in the United States in an effort to seek an explanation for the changes in this trend. This report explores some of the areas studied by Beck et al in 1977,⁶ who looked at the organizational status of family practice programs and selection of family practice for residency training.

Methods

In April 1981 a one-page questionnaire was sent to 135 medical schools in the United States. Of the 92 questionnaires returned, 9 did not provide enough data and were eliminated. Seventy-one of the questionnaires contained data that allowed for classification according to organizational structure. Of the 92 schools, 59 have an academic department of family practice, 7 have a division or section, and 5 have no family practice

program. All questionnaires were designed to maintain anonymity, although many of the schools volunteered their identity. Most of the questionnaires were completed by family practice faculty. There was no follow-up on nonresponders.

The first question asked for the percentage of graduating students choosing family practice residencies annually from 1978 to 1981. Respondents were also asked in an open-ended format for their opinion as to what factors contributed to any increase or decrease in selection of a family practice residency by their graduates. Other questions were whether any federal funding was available and what was the administrative structure of family practice at their institution. There were no questions covering curriculum. Information on administrative status of family practice in all medical schools⁷ revealed that the survey contained a higher percentage of schools with departments and divisions of family practice. Eighty-three percent of the respondents had a department of family practice, and 10 percent had a division. This compares with data from all US medical schools, of which 75 percent have a department of family practice, 8 percent have a division, and 5 percent have a family practice administrative entity other than a department or division.

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Year	Present Survey: US Graduates Selecting Family Practice (mean)	Standard Deviation	NRMP Results: US Graduates Matching for Family Practice (approximate)
1978	16.32	8.14	14.0
1979	16.84	7.91	14.0
1980	16.97	9.86	14.0
1981	15.77	8.49	14.0

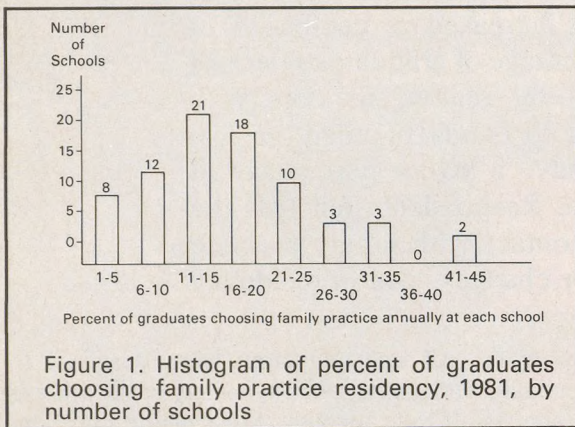


Figure 1. Histogram of percent of graduates choosing family practice residency, 1981, by number of schools

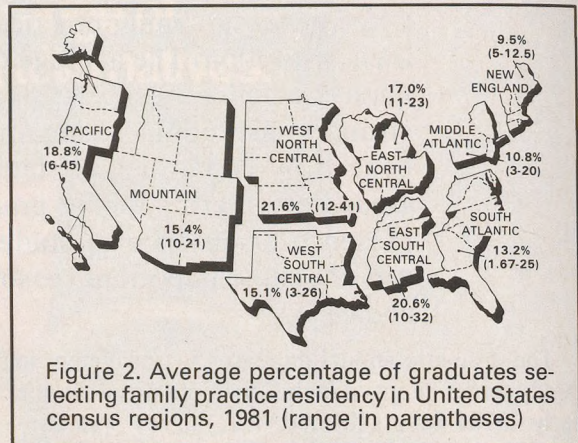


Figure 2. Average percentage of graduates selecting family practice residency in United States census regions, 1981 (range in parentheses)

Results

The results of the survey can be compared with the data base from a census of all medical school graduates conducted by the National Resident Matching Plan (NRMP) (Table 1). The higher percentages of graduates entering family practice reported in this survey may reflect the response bias of the survey (ie, the survey has a greater representation of responses from schools that have a department or division of family practice, whereas the NRMP obtains data from all schools). This survey reveals a high percentage of students entering family practice. This may result from the respondents' being aware of additional students who obtain family practice residencies outside the NRMP.

It was found that the mean percentage of US graduates entering family practice in 1981 was 15.77. When the distribution across the United States was considered (Figure 1), the mode is 11 to 15 percent (21 schools report that 11 to 15 percent of their graduates selected family practice residencies).

When the regional interest in family practice

was considered, the West North Central area led the nation in recruiting students to family practice (Figure 2). A number of schools in each region, however, did not respond to the survey.

The response of a school to the question, "How many of your graduates matched in family practice from 1978 to 1981?" allowed for computation of whether each school experienced an increase, decrease, or no change in the percentage of graduates entering family practice compared with the base year 1978.

During the last several years more schools are reporting decreases in family practice selection, and 53 percent reported a smaller percentage of their students entered family practice in 1981 than in 1978. Twenty-seven percent reported no change in the percentage of students selecting family practice. Twenty percent of the schools reported an increase in the percentage of students selecting family practice.

Several closed-ended questions addressed the issue of what differentiates schools producing increasing numbers of family practice graduates

Table 2. Average Percentage of Graduates Choosing Family Practice Residency by Program Structure

Structure	1978	1979	1980	1981
Department	18.24	18.93	19.29	18.21
Other structure	11.17	11.36	11.94	12.47
No official status	6.00	6.14	5.10	4.54

from those that are showing decreasing numbers. There was no significant difference in the percent of students selecting family practice between schools which received federal predoctoral training grants and those without these grants. The low response rate limits one's ability to generalize this finding.

Inquiry into the administrative status of the family practice unit at each school (Table 2) revealed that among the 71 schools for which the determination was made 59 have family practice departments, 7 have divisions or sections, and 5 have no official family practice administrative structure. The schools in which family practice has departmental status graduated a significantly higher percentage of students choosing family practice residencies than did schools having no official program or a different program structure.

The open-ended section of the questionnaire asked the respondent to explain why interest in family practice at their institution has either increased or decreased (Table 3). Respondents often gave more than one reason for the change. Many schools that reported increases in student interest said contact with students (either through curriculum or other exposure to role models) accounted for increases. Involvement of residents in teaching and the presence of an excellent residency program were the next most important reasons given for increases. The schools that reported decreases stated family practice faculty had not had enough contact with students, either through curriculum or extramurally. The second most common problem reported was intense recruitment efforts by other disciplines; specifically, internal medicine (primary care) was cited by four schools.

Discussion

The survey's low response rate limits the "generalizability" of the study results. The data reveal

Table 3. Reasons for Change in the Percentage of Students Entering Family Practice (59 Responses)

	No.
Reason Given for Increase	
Adequate or increased student contact	13
Excellent family practice residents or residency	5
Strong chairman or department	4
Admissions procedure favors students interested in primary care	3
Total	25
Reasons Given for Decrease	
Not enough student contact	16
Increased efforts of non-family practice colleagues in recruiting students	5
Change in student attitude of interest	4
Departmental turmoil, lack of leadership	3
Admission policy biased against family practice	2
Lack of family practice residency positions in area	2
All other reasons	2
Total	34

that schools with departmental status have a higher percentage of graduates that select family practice. Corroboration of this finding is found in the study of Beck et al.⁶ Schools with family practice departments may be better able to influence admissions policy, to lobby more effectively for curriculum time, and to arrange more time for teaching and counseling. Also, departments may produce better residents or excellent models of a family practice residency program. Respondents pointed to each of these factors as important. Indeed, Beck et al⁶ found that family practice departments have more faculty and more teaching time in the preclinical years and are more likely to have required clinical rotations. Anecdotally, schools with departments also report more resident-student and faculty-student contact.

At the opposite extreme were schools with no administrative family practice unit. They reported few or no courses and infrequent extramural faculty exposure.

Eagleson and Tobolic⁸ found that exposure to family practice curriculum, preceptorship in particular, is especially influential in the decision to select family medicine. Curriculum is, of course, only one of the factors exerting influence on career choice. They also observed that noncurriculum factors, such as family considerations and presence of a hometown family physician, were somewhat influential in residency choice.⁸ This study did not allow for quantification of the contact hours spent in family practice at each institution.

At issue is whether those factors influential on career choice can be manipulated so that the likelihood of selection of family practice is increased. Boulger⁹ reported on the extremely successful experience at the University of Minnesota, which attracts 55 percent of its graduates into family practice. The University of Minnesota has a selection bias favoring students interested in primary care, and it has required clinical rotations in family practice. It appears that the admissions committee, by selecting students with particular career predispositions, may have an impact on the eventual residency choice of its graduates.

This study shows that although extramural funding may help to establish departments and pay for curriculum development, it does not by itself seem to encourage selection of family practice residency. Schools without extramural funding were equally successful in recruiting students to family practice.

The reason for changes in interest in family practice may be tied in part to changing societal values. Asken and Strock¹⁰ pointed out that students may select family practice careers because of influences on attitudes that take place entirely outside the academic training setting. (The influence of nonacademic role models, for example, and a preference to treat the "whole person" were cited frequently by students as reasons for selecting a family practice residency.) The implication is that as social attitudes change, so may interest in family practice.

Several of the respondents in this survey reinforced this idea by commenting that the rapid growth of family medicine may have been fueled by growing social activism, the "war on poverty,"

the holistic health movement, and so on.

The literature implies that success in recruiting students into family practice is dependent on a number of interacting variables. Variables that favor family practice recruitment fall into three broad categories: (1) institutional commitment (favorable admissions policy, adequate curriculum time, family practice with departmental status), (2) a discrete family practice unit (strong leadership, adequate number of faculty, curriculum, adequate exposure to students, well-developed residency program), and (3) sociologic phenomena (appreciation of the generalist and holistic approaches, extramural contact with family physicians).

Institutions with a decrease in the number of graduates choosing family practice may be interested in making use of new strategies in order to sustain or increase student recruitment into family practice residency. These efforts might include increasing required contact time, developing a more active student counseling program, and lobbying for an admissions policy that favors students interested in primary care.

Future research should identify the impact of each variable that is contributing to residency selection; a theoretical model to judge the cost-effectiveness of each approach would be useful to educators and health planners.

Acknowledgment

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