

## Family Medicine's Place in Predoctoral Medical Education: A Survey of US Medical School Deans and Department Chairmen

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*Family medicine faculty at medical schools throughout the United States have stated that their specialty should be recognized as a required part of the predoctoral medical curriculum. Other medical faculty members have expressed disagreement. Support for family medicine as an integral part of medical education can be found in several sources, among them the Flexner Report and the Report of the Panel on the General Professional Education of the Physician (GPEP). A survey of deans of US medical schools and department chairs of family medicine at the same schools highlights the divergent views of the place of family medicine in predoctoral medical education. Family medicine faculty must argue convincingly that medical education should not be limited to an information transfer process before they will succeed in having family medicine recognized as a required part of medical education throughout the country.*

Family medicine faculty began joining academic medical circles as teachers of family practice residents during the 1970s. By 1980 approximately 100 American medical schools had departments or divisions of family medicine, and more have been added since. This presence of family medicine faculty, even though primarily as postgraduate educators, affects medical students in many ways, such as, increasing the number of students selecting a family practice residency after graduation.<sup>1</sup> In most medical schools, however, family medicine has not been integrated into the medical school curriculum as one of the major clinical disciplines. Indeed, in answer to a survey question concerning the role of family physicians in teaching clinical skills to medical students, one medical educator insisted that family medicine has no place in the predoctoral curriculum. This response comes in spite of the great interest in the predoctoral medical curriculum expressed by family medicine educators. In recent years there has been continued conflict in many medical schools about what, if any, role family medicine should have in the education of medical students.

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It is noteworthy and not coincidental that this conflict about family medicine appears on a background of great ferment in medical education. Frustration among both medical students and their teachers currently exists, with resulting self-examination and questioning of basic assumptions. In fact, some have even referred to the ferment as a crisis in medical education.

Given the overlapping interests of family medicine faculty with the renewed emphasis on the general professional education of medical students, there is promise of a return of generalists to the process of medical education. What follows is a description of a survey of deans of medical education and family medicine department chairs in the United States. The survey is an attempt to estimate the present and future influence of family medicine on the medical student curriculum.

### METHODS

From the list of 15 recommendations of the Report of the Panel on the General Professional Education of the Physician (GPEP) prepared by the Association of American Medical Colleges<sup>2</sup> that have been emphasized by family medicine (Table 1), 12 areas of interest were selected for investigation. A series of questions was designed

**TABLE 1. GENERAL PROFESSIONAL EDUCATION OF THE PHYSICIAN (GPEP): RECOMMENDATIONS ADVOCATED BY FAMILY MEDICINE**

1. Medical students should develop the skills, values, and attitudes of a caring professional to the same extent as they work to develop a knowledge base
2. Medical faculties should clearly describe the level of knowledge and skills needed to begin graduate medical training
3. Medical faculties should adapt predoctoral training to changing demographics and the modifications occurring in the health care system
4. Medical education should emphasize the physician's responsibility to promote health and prevent disease
5. Medical faculties should evaluate students to determine their ability to learn independently
6. Medical students should have unscheduled time for independent learning
7. Medical faculties should reduce required lecture hours
8. Medical students should learn to be problem solvers rather than passive recipients of information
9. Medical students should be evaluated on their analytical and problem-solving skills
10. Medical students should be taught the application of information sciences and computer technology to medical practice
11. Medical students should receive instruction in ambulatory medicine
12. Medical faculties should integrate basic and clinical science where possible
13. Medical faculties should have the time and opportunity to establish a mentor relationship with individual students
14. Medical schools should establish programs to assist faculty members to expand their teaching capabilities beyond their specialized fields
15. Medical faculties should provide support and guidance to enhance the personal development of each medical student

to discover whether the responding school already incorporated in its curriculum a particular GPEP recommendation. Each question answered affirmatively was followed with questions concerning which departments administer that particular part of the curriculum, what the curricular objectives are, what year of medical school the course is presented, and how much curricular time is devoted to the specific topic. The final question asked the respondent to predict the effect of the GPEP Report on their school's curriculum; specifically of interest was whether any departments might contribute more as the curriculum was altered to adhere to GPEP recommendations. A cover letter accompanied each survey explaining the purpose of the study. Duplicate copies of the letter and the survey were sent to the department chairs of family medicine and the deans of medical education at each medical school in the United States. Lists of department chairs of family medicine and deans of medical education were obtained from the American Academy of Family Physicians (AAFP) and the University of Utah School of Medicine dean's office, respectively. Twelve schools do not have an academic unit for family medicine according to the official list of the AAFP. These schools received only one copy of the survey, it being addressed to the dean of medical education. Seven departments of family medicine listed with AAFP had no corresponding medical school on the list of American medical schools obtained from the dean's office at the University of Utah School of Medicine. Again, those schools received only one copy of the survey, in this case sent to the department chair.

Descriptive statistics were used to analyze the data. Responses of deans were summarized separately from the department chairs. When the dean and the department chair responded from the same school, their answers were matched to determine congruence.

## RESULTS

Surveys were sent to 131 deans' offices and 126 to departments of family medicine. There were 119 possible matches after adjusting for schools receiving only one survey. A total of 257 surveys were mailed. Of these, 179 were returned, a response rate of 70 percent. Ninety-one responses were from departments of family medicine (72 percent) and 88 responses were from deans of medical education (67 percent). Four responses were not usable because they were not identifiable as to actual responding party. Five of the respondents did not fill out the questionnaire at all (four were deans and one was a department chair). A total of 56 matched pairs were obtained (47 percent). Eighty-seven percent of all surveyed schools were represented by at least one response. The response rate was probably lowered by a recent ruling of the Association of American Medical Colleges (AAMC) requesting that all surveys concerning medical education go through that body. Such a policy was unknown to the authors prior to this study.

Table 2 shows the percentage of the respondents answering yes to the 11 questions on the survey by deans and department chairs, respectively. The average required ambulatory clerkship length was eight weeks for dean respondents ( $SD = 5.4$  weeks) and eight weeks for department chairs ( $SD = 8.4$  weeks).

The departments that are perceived to administer the curricular activity in question by deans and department chairs, respectively, are displayed in Tables 3 and 4. Concerning what administrative unit at the responding school had responsibility for helping faculty improve their teaching skills, deans listed a department of medical education or the dean's office itself 58 times, while department chairs listed the same units only 48 times. Two deans listed the

**TABLE 2. PERCENTAGE OF DEANS AND DEPARTMENT CHAIRS RESPONDING YES TO SURVEY QUESTIONS**

Question Topic	Percent of Deans Answering Yes	Percent of Department Chairs Answering Yes
Competency list	19	10
Ambulatory training	81	94
Geriatric training	30	25
Health promotion training	62	43
Independent learning	81	59
Problem solving	61	61
Information sciences	51	53
Faculty training	72	75
Student advisor	79	82
Student programs	54	77
Predict changes	32	57

*Note: The numbers indicate how often the corresponding department was chosen by respondents answering yes to the question; each respondent was allowed to choose one or more departments as administration for each curricular activity*

department of family medicine at their school as a resource for faculty improvement, while 15 department chairs thought that their department was such a resource. Nearly uniformly, deans and department chairs indicated that all departments participated in student advising.

The deans also thought that most all departments participated in providing support for student programs. However, 28 family medicine department chairs indicated that at their schools only their department had an administrative unit specifically devoted to student activities, while 15 chairs stated that all departments provided administrative support for student programs.

Of the 56 schools that sent responses from both the dean and the department chair, four pairs were not comparable because one or both respondents failed to complete the survey. From the 52 matched pairs, 27 of the department chairs thought that family medicine faculty would make significantly more contributions to the curriculum as the GPEP Report was reviewed and incorporated as opposed to only three of the deans.

Additional comments were solicited at the conclusion of the survey. About two thirds made no additional comments. Four respondents stated that no apparent action related to the GPEP Report was being taken at their school. Thirteen stated that the school had formed official committees to study the GPEP Report and make recommendations about incorporating it into their curricula. Nineteen respondents stated that the survey inadequately characterized their school, either because the instrument itself was too vague or because their school was so unique. Nine respondents, all of them department chairs, stated

**TABLE 3. DEANS' RESPONSES TO SURVEY QUESTIONNAIRE**

Question Topics	Departments as Options for Respondents						
	Family Medicine	Internal Medicine	Pediatrics	Surgery	Obstetrics/Gynecology	Psychiatry	Other
Ambulatory training	54	37	48	11	18	17	11
Geriatric training	14	20	—	5	3	9	7
Health promotion training	26	22	13	5	12	9	37
Independent learning	37	46	45	42	41	36	40
Problem solving	20	36	22	18	15	18	29
Information sciences	5	5	2	2	2	3	39
Predict changes	12	21	17	14	13	15	2

**TABLE 4. DEPARTMENT CHAIRS' RESPONSES TO SURVEY QUESTIONNAIRE**

Question Topics	Departments as Options for Respondents						
	Family Medicine	Internal Medicine	Pediatrics	Surgery	Obstetrics/Gynecology	Psychiatry	Other
Ambulatory training	80	37	45	5	16	10	7
Geriatric training	19	11	—	2	1	2	1
Health promotion training	32	5	6	1	4	1	13
Independent learning	38	27	24	21	20	21	19
Problem solving	44	17	12	10	7	11	16
Information sciences	21	9	4	3	2	2	24
Predict changes	45	15	14	9	8	12	8

that they knew too little about other departments to characterize their school's curriculum outside the department of family medicine. Six respondents indicated that family medicine faculty had either no influence on the curriculum or were losing what influence they had. One respondent, a department chair, indicated that his department was considered the leader in curriculum reform as the GPEP Report was reviewed.

Documents describing the curriculum objectives for the education of medical students were solicited. Only ten such documents were returned, two of which represented a list of complete objectives of its medical school.

## DISCUSSION

The discussion of these survey results is based on a response rate of approximately 70 percent. Two methodological problems encountered were the response rate and interpretation of survey questions by respondents. The survey questions did not always serve as appropriate vehicles for communicating the reality of the medical education process found at some medical schools. Indeed, the variety of educational styles discovered was enormous. Certainly no person could formulate a questionnaire about medical education that is both precise and universally understandable. With the present study, where explanation of terms was thought necessary, the wording of the GPEP Report was adhered to as closely as possible. Nonetheless, several respondents thought that the survey questions were either so rigid that adequate explanation of their school's curriculum was not possible or so broad as to be meaningless. In response to such criticism, however, it should be noted that 80 percent of the respondents who completed the questionnaire asked to have a copy of the results.

Another consideration was the inherent bias of asking leading family medicine educators to characterize the present and future influence of family medicine on medical education. Indeed, some of the responding department chairs forthrightly admitted that they knew little about what other departments were doing at their own schools. The authors considered attempting to blind all respondents concerning the nature of the study by describing the study as simply being about medical education in general. It is doubtful, however, that such subterfuge would have netted information any less biased. In addition, the finding that family medicine educators have only limited information about their fellow medical educators is of importance in itself.

In spite of these weaknesses, several important points can be made by comparing the responses of the deans with those of the department chairs.

1. Deans are approximately twice as likely as family medicine department chairs to think that their school had

defined the end product of medical education. Only two schools, however, provided documentation that they have actually constructed a complete list of competencies for the general professional education of physicians.

2. Both deans and department chairs agree that ambulatory primary care teaching is nearly universally present at medical schools in the United States. While they agree that family medicine faculty are most often responsible for such teaching, department chairs are much more likely to indicate that family physicians are the source of ambulatory primary care teaching than deans.

3. Both groups agree that geriatrics is rarely a required portion of the medical curriculum in the United States. Where it is required, department chairs are likely to indicate that their own faculties are the primary teachers and deans are likely to indicate that geriatrics is taught by internal medicine faculty.

4. Deans are more likely than department chairs to indicate that health promotion and disease prevention are part of their medical school curricula. Deans are more likely to indicate that internal medicine and preventive medicine faculty carry this teaching responsibility, while department chairs overwhelmingly favor their own faculty members as health promotion teachers.

5. Deans consider independent learning skills to be an integral part of medical education, or, as some of them stated in responding to the survey, medical education, by definition, teaches independent learning. They were, therefore, very likely to indicate that all departments of their medical school taught students to learn independently regardless of the academic year involved. Department chairs, on the other hand, tended to view independent learning as a unique set of skills needing specific and structured separate curricula and less often thought that their schools had such instruction.

6. About three fifths of both groups thought that problem-solving skills were being addressed by present curricula. Department chairs were approximately twice as likely as deans to think that family medicine faculty were involved in teaching problem solving, however.

7. About one half of both groups indicated that the information sciences were taught at their schools. Interestingly, a variety of unusual departments was cited by the deans as performing the instruction in information sciences, including such departments as computer medicine, bio-information centers, sociomedical sciences, and comprehensive medicine.

8. Three fourths of both groups indicated that faculty at their institutions were aided in improving their teaching skills. Department chairs were much more likely to think that faculty support originated in the department of family medicine at their school, and deans more often stated that the dean's office provided faculty support.

9. Department chairs and deans alike nearly uniformly agreed that all students had access to advisors who rep-

resented all departments of the school and who received no salary or official recognition for advising students.

10. Department chairs were twice as likely to view their own departments as having the only specific administrative unit for student programs in their school than to acknowledge the presence of such administrative resources in other departments.

11. By a margin of nearly two to one, department chairs over deans anticipated change in the curriculum as their schools review the GPEP Report. Where such change was anticipated, department chairs were three times as likely as deans to feel that family medicine faculty would assume more curricular responsibility. It must be noted that this question went unanswered more often than any other, indicating a large degree of uncertainty from both groups.

The analysis of the responses for deans and department chairs responding from the same medical school tended to confirm the above-listed impressions. Discordance between the two respondent groups occurred mostly around health promotion, independent learning, information sciences, administration units, and departments more likely to contribute to implementing GPEP recommendations.

#### References

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