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ABSTRACT

The electives program at the University of Missouri at Kansas City School of Medicine was evaluated. The program provides opportunities for learning in community hospitals, physicians' offices and clinics, the main campus of the university, and other health-resources locations in western Missouri. The School of Medicine emphasizes primary care in its overall curriculum and its electives. Many of the primary care electives are located outside the Kansas City Metropolitan Area. At the completion of each elective, the physician is asked to complete an evaluation instrument which requests that he comment on how well the student achieved these objectives, and students rate the effectiveness of the experience and add explanatory comments. Students gererally felt that they had performed well in their electives as compared with other students at the same level, and very few students perceived any aspect of their electives to be unsatisfactory. Students' responses regarding learning support materials indicate that improvements should be made in providing appropriate materials. The physician evaluations of students were similar to the students' self-evaluation in their generally high ratings on the 11 evaluation dimensions. Eleven student interviews were also conducted to obtain additional information. Some of the students' responses to the 12 interview topics are included. (SW)

WMAHEC-SUPPORTED ELECTIVES AT THE UMKC SCHOOL OF MEDICINE IN 1978-1979

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WMAHEC-SUPPORTED ELECTIVES AT THE UMKC SCHOOL OF MEDICINE IN 1978-1979

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and Carol Long

The UMKC School of Medicine operates a six year program initiated in 1970, which allows students to enter directly from high school and to earn a combined BA/MD degree. The curriculum is forty-eight weeks each year for five years - thirty-six weeks for the first year, a total of 276 weeks of curriculum time equivalent to the curriculum time spent by students in four years of undergraduate work and four years of medical school with the usual vacations. The curriculum emphasizes learning in community hospitals, physicians' offices and clinics, the main campus of the University of Missouri - Kansas City, and other health-resources locations in western Missouri.

Electives are an integral component of the curriculum of the School of Medicine. Electives are approved by a panel of clinicians, basic scientists, and behavioral scientists appointed by the Council on Curriculum. Students may take electives in Anatomy, Radiology, Surgery, or numerous other areas in which they have a special interest. The choice of an elective is a decision to be made by the student and docent working together, guided by the student's performance on the school's internal evaluation methods, the Quarterly Profile Examination, by the docent's opinion of the student's need, and by the student's career objectives. The 1978-79 Elective Book which listed possible assignments included more than 300 electives.

Because of the School of Medicine's emphasis on preparing primary care physicians, a special effort has been made to develop and

place students in Primary Care electives. These electives are in Family Practice, General Internal Medicine, and Pediatrics. Each student must have at least three electives in Primary Care in order to graduate. Most electives in Primary Care are for one month.

The School of Medicine emphasizes primary care in its overall curriculum and its electives partly because it is believed that this focus will help prepare outstanding practitioners in line with the needs of society. Many of the Primary Care electives are located outside the Kansas City Metropolitan Area, in order to expose students to conditions in communities which typically need additional family practitioners and to help them learn to function effectively in this type of setting. It also is hoped that this type of experience outside Kansas City will "interest graduating physicians in Primary Care - Family Practice, so desperately needed in small towns and outlying areas."*

NUMBER AND DISTRIBUTION OF ELECTIVES

In addition to encouraging primary care experience, WMAHEC also is interested in stimulating general improvements in physician preparation for and service in medically underserved parts of its 38-county region. To this end, it provides stipends of $366 a month for students willing to participate in one-month electives outside Jackson County. Thirty-one** of the 1978-79 elective sites were in locations outside Jackson County. Twenty of these 31 were

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*WMAHEC Newsletter, Vol. 3, Number 10, October 1976, p. 3.

**See Appendix A.

in Primary Care Specialties, five were in Pulmonary Medicine, two each were in Radiology and Cardiology, and two were in Gastroenterology and Psychiatry, respectively. It is hoped that operation of the WMAHEC elective program also will help in disseminating up-to-date medical information to physicians who participate as preceptors.

The 1978-79 WMAHEC contract specified goals for the nature and geographic distribution of School of Medicine electives (i.e. preceptorships) in the 38-county WMAHEC region. The relevant paragraph reads as follows with respect to "undergraduate medicine."

> Provide a minimum of 55 student months of extramural clinical medical education in the WMAHEC region. The majority of such education shall be primary care preceptorships, and all experiences shall be conducted at sites geographically remote from the UMKC Health Sciences Center.

The School of Medicine attempted to meet these contract terms during the 1978-79 academic year. As mentioned above, 31 student months were served (by 29 students) in WMAHEC-supported extramural, clinical electives. This number represents 56 percent of the project's contractual obligation. A majority of these months (68%) were in electives classified by the School of Medicine as Primary Care.*

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*The UMKC definition is well in line with expert opinion nationally. "Primary Care" is an evolving concept of health services organization and provision. The concept means different things to different people, and several groups and a host of writers have attempted to define it. However, one widely accepted definition is that developed by Alpert and Charney. According to this definition, the primary care physician should provide the initial contact or point of entry to the health care system for the patient, assume longitudinal responsibility regardless of the presence or absence of disease, and provide a broad integrationist function vis-a-vis the other health resources involved in the physical, psychological,

EVALUATION QUESTIONNAIRES

To a significant degree, student activities and objectives for each elective are developed individually by the supervising physician (instructor) and the campus faculty. At the completion of each elective, the physician is asked to complete an evaluation instrument which requests that he or she comment on how well the student achieved these objectives, and students rate the effectiveness of the experience and add explanatory comments on an evaluation instrument which they complete independently. Copies of these instruments are included in Appendix B.

Although objectives may vary somewhat from one elective to another, there are some objectives which are common to all. These objectives involve the development of attitudes, knowledge, and behaviors required to become a successful practitioner. To assess the attainment of these objectives, students rate their own performance and the instructor rates the student on a nine-point scale ranging from very unsatisfactory to definitely superior under each of the following eleven headings or dimensions: Attitude; Peer Relations; Reliability; Medical Information; Concepts; Skills; Maturity; Patient Rapport; Ingenuity; Conscientiousness; and Integrity. A copy of the

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and social aspects of the patient's care. On the basis of these criteria, Alpert and Charney judge family practice to completely satisfy the definition of primary medicine, with pediatrics and internal medicine doing so generally. (J. Alpert and E. Charney, The Education of Physicians for Primary Care. DHEW Publication No. HRA 74 3113, 1974.) The Health Professions Educational Assistance Act of 1976 (P.L. 94-484) includes family medicine, general internal medicine, and general pediatrics as primary care specialties.

working definitions used for this purpose is included in the appendix.

To analyze these questionnaires, we had data on electives served between October 1, 1978 and May 30, 1979. During this period of time, 25 WMAHEC-sponsored electives were completed by 23 students. Data from questionnaires for electives served in June, July, August, and September had not been compiled and hence were not available in usable form, but there is no reason to believe that results for the first 25 electives would be different than results for the full group of 71.

Student Questionnaire Response

Specific instructions to the student were as follows: For each dimension mark the box that best summarizes your evaluation of yourself as compared to other students at the same level. Student responses are shown in Table 1.

TABLE 1

SELF-EVALUATION RATINGS OF STUDENT PERFORMANCE
IN WMAHEC-SPONSORED ELECTIVES

Dimension	Response Category									
	Unsatisfactory			Satisfactory				Superior		Total
	1	2	3	4	5	6	7	8	9	
1. Attitude					2	5	9	7	1	24
2. Peer Relations					1	7	7	4	1	20
3. Reliability					2	6	6	8	2	24
4. Medical Information					1	13	7	2	0	23
5. Concepts					2	13	8	1	0	24
6. Skills				1	2	9	12	0	0	24
7. Maturity					2	8	9	4	1	24
8. Patient Rapport				1	5	9	4	5		24
9. Ingenuity				1	8	9	4	2		24
10. Conscientiousness				1	6	10	4	3		24
11. Integrity				1	6	7	4	6		24

*Numbers shown are actual numbers of responses. Totals for the dimensions are less than 25 due to non-responses.

As can be seen in the tallies shown in Table 1, students generally felt that they had performed well in their electives as compared with other students at the same level. In no case were any of the self-evaluation ratings less than 4 on the nine-point scale with 1-3 denoting "Unsatisfactory" and 7-9 denoting "Superior." Among the nine dimensions, there were only two on which the modal response and

the majority of responses were not in the 7-9 (Superior) categories. These two dimensions are in the "Clinical Competence" section of the questionnaire. Perhaps the reason why students rate themselves lower on this section than on the other dimensions is because they are still acquiring medical information and concepts while in the School of Medicine, and do not feel that they have made superior progress while they are still working to master these aspects of clinical competence.

The second part of the student questionnaire requested respondents to answer as follows: "From your experience, please rate the effectiveness of this rotation/elective in each of the following by circling the number you feel is appropriate." Effectiveness of the elective is to be rated in terms of the goals for each particular elective as stated in the Curriculum Book. As in the first part of the questionnaire, response categories ranged from 1-3 (Unsatisfactory) to 7-9 (Superior). A copy of this part of the questionnaire is included in the appendix to this report. Aspects of the electives which were rated for effectiveness are shown in Table 2, along with data on responses of our sample of students who participated in the first 25 electives.

As shown in Table 2, very few students perceived any aspect of their electives to be unsatisfactory. None of the sixteen items received more than one unsatisfactory rating. Conversely, only one item--"Learning Support Materials" had modal responses below "Superior." As regards the "Overall Experience," 21 out of 23 respondents (91%) rated their electives in the Superior categories.

TABLE 2

STUDENT RATINGS OF EFFECTIVENESS OF WMAHEC-SUPPORTED ELECTIVES

Aspect	Response Category*									Total
	Unsatisfactory			Satisfactory			Superior			
	1	2	3	4	5	6	7	8	9	
1. Facts learned			1	0	1	1	11	6	3	23
2. Skills developed				1	4	1	9	4	3	22
3. Concepts acquired.				1	1	1	9	7	3	22
4. Adequate exposure to a broad range of clinical problems in this field.				1	1	1	5	7	8	23
5. Learning Support Materials.			1	0	6	8	5	3	0	23
6. Specificity, clarity, and quality of reading assignments.			1	0	5	2	11	2	1	22
7. Effectiveness of Instructor(s) as Teacher(s).			1	0	0	0	3	8	11	23
8. Personal attention received from Instructor.			1	0	1	0	0	4	16	22
9. Personal attention received from Resident Staff.							2	1	1	4
10. Personal attention received from Attending Staff.							2	4	5	11
11. Patient responsibilities.			1	0	0	3	3	7	8	23
12. "On Call" schedule.				0	2	1	7	2	2	14
13. Attitudes of nurses.					1	3	3	9	7	23
14. Amount of relevant work.				1	1		7	7	7	23
15. Scheduled Conferences and Lectures: time, frequency, relations to clinical problems, preparation by teachers.			1		6	6	2	2	1	18
16. Overall experience.				1		1	5	7	9	23

*Numbers shown are actual numbers of responses. Totals for the dimensions are less than 25 due to non-response. Most of the non-responses were to non-applicable items.

It should be noted that the elective experiences are purposely designed to be very diverse, with sites and learning assignments selected to provide students an opportunity to follow their individual interests and to learn skills which they and their advisors believe will be most valuable to them. It is difficult to provide appropriate learning resource materials since the nature and conditions of electives differ so much from location to location. Student responses regarding "Learning Support Materials" indicate that improvements should be made in providing appropriate materials, but this should be done without making the electives an overly monolithic learning experience in violation of some of their primary goals.

Similarly, improvements could be made in other aspects of the elective such as "Scheduled Conferences and Lectures," but one also should keep in mind that the WMAHEC electives are an extramural clinical experience which minimizes scheduled conferences and lectures like those that provide a fundamental portion of the on-campus-curriculum. Efforts to improve the effectiveness of scheduled conferences and lectures should be undertaken cautiously lest they lead to too much rigidity counter to the primary purposes of the elective program. In addition, certain elective experiences do not lend themselves to this type of activity.

It also should be noted that fewer than half the respondents answered two of the items: "Personal attention received from Resident Staff" and "Personal attention from Attending Staff." Apparently this is because the meaning of the terms "resident staff" and "attending staff" are not clear and/or because clearly-designed

staff in these categories are not a part of many or most electives. In any case, lack of response on these items does not seem to indicate any underlying weakness in the WMAHEC-sponsored electives but perhaps reflects the fact that in most of the electives no residents were involved.

Finally, we should stress the fact that the majority of participants found the electives to be superior learning experiences with respect to most of the items on which they were requested to rate their assignments. Response patterns on this type generally reflect, to some extent, a positive response set students tend to exemplify with respect to assignments they have volunteered to participate in, but they also reflect a general view that the WMAHEC-sponsored electives have been valuable with respect to the objectives stated for them in the UMKC Curriculum Book and the School of Medicine-WMAHEC contract designed to prepare future physicians for primary-care practice in the WMAHEC region and elsewhere. (We will return to this last point in a later section of this report dealing with student interviews.) In addition, it also should be kept in mind that the student questionnaires are examined each year by faculty and evaluation staff at the School of Medicine, with emphasis in this examination placed on identifying elective sites at which students or physicians gave unsatisfactory ratings, and on improving the selection of sites for future placements. Thus some effort has been made in past years to reduce the frequency of selection of unsatisfactory sites. Year-to-year efforts along these lines probably help account for the very high general ratings reported above concerning the administration of the student questionnaire.

Physician Questionnaire Response

Questionnaires filled out by the preceptorship physicians who worked with participating students were identical in content (items and response categories) with the first part of the student questionnaire. Directions given to the responding physicians were as follows: "For each dimension mark the box that best summarizes your evaluation of this student as compared to other students at the same level." Responses of the physicians are shown in Table 3.

TABLE 3

PHYSICIAN RATINGS OF STUDENT PERFORMANCE IN WMAHEC-SPONSORED ELECTIVES

Dimension	Response Category: Unsatisfactory 1	2	3	Satisfactory 4	5	6	7	Superior 8	9	Total
1. Attitude			1	1	7	4	8			21
2. Peer Relations			1	3	4	8	4			20
3. Reliability				2	3	9	7			21
4. Medical Information		2	1	3	5	5	5			21
5. Concepts		1	3	3	4	7	3			21
6. Skills			2	3	6	8	2			21
7. Maturity			2	1	9	5	4			21
8. Patient Rapport			1	2	7	7	4			21
9. Ingenuity			3	2	9	2	5			21
10. Conscientiousness			1		6	7	7			21
11. Integrity				2	2	9	8			21

As shown in Table 3, the physician evaluations of students are similar to the students' self-evaluations in their generally high ratings on the eleven dimensions. No rating for any student was less than satisfactory, and the modal responses and majority of ratings for all the dimensions are in the "Superior" category. The main difference is that while the majority of student self-evaluation ratings on two of the clinical competence dimensions (Medical Information, Concepts) were in the "Satisfactory" categories, here as elsewhere the majority of physicians' responses were in the "Superior" categories. It is apparent that the physicians have a more positive perception of students' performance relative to other students at the same level than the students have of their own performance on these three dimensions.* Perhaps this i because the students tend to show some uncertainty concerning their clinical competence while they are still preparing to be physicians and working to master all the information and skills they will need to practice medicine. In any case it is clear that the physicians generally have positive perceptions about the performance of the students, and presumably are generally satisfied with the capabilities and performance of their students.

Another reason why physicians' ratings on clinical competence may be higher than the students' self-evaluations on these dimensions may be because students are learning about the most recent research and techniques in the School of Medicine, and the physicians with whom they work have an opportunity to up-date themselves on some matters

*When "Unsatisfactory" categories and "Satisfactory" categories are added and scores on the three clinical competence items are aggregated, the physicians are significantly more likely to give Superior ratings on clinical competence than the students give themselves ($X^2 = 6.88$; $p < .01$).

through their contact with the students. The exchange that takes place between the preceptor physician and the student may in fact be considered as a type of informal continuing education. This possibility underlines the reciprocal benefits inherent in extramural preceptorship programs such as the School of Medicine electives.

STUDENT INTERVIEWS

To obtain additional information on WMAHEC-supported electives in 1978-1979, we conducted interviews with nineteen students after they had returned from their off-campus clinical experience. All of the students interviewed completed their electives between October, 1978 and May, 1979, and all but four participated in electives which were classified as "primary care." Most of the interviews ranged from one to one-and-one-half hours. Information from the interviews will be presented and discussed under the following headings: 1) Clinical problems encountered in the preceptorship setting; 2) Diagnostic and therapeutic techniques in the preceptorship setting; 3) Learning to view and treat the patient in the context of his or her family and community; 4) Enhancing interviewing and human relation skills through experience in providing care; 5) Knowledge through experience of referral and consultation processes in a community setting with multiple and varied health resources; 6) Understanding the role and lifestyle of a primary-care physician in the total community health care system; 7) Learning through personal experience about the skills, roles, and capabilities of office support personnel such as receptionist,nurses, etc.; 8) Gaining familiarity with business and monitoring aspects of the medical practice, such as bookkeeping,

records system, appointment scheduling, etc.; 9) Understanding of preventive health practices and their utilization in a primary care practice; 10) Understanding of public health and environmental factors in relation to the private practice of medicine; 11) Exposure to rural practice; and 12) Problems in Administration of the Electives.

Part of the interview with each student was structured and part was unstructured. The structured part consisted of ten questions for which respondents were asked to check one of seven response categories with the polls labeled "very much" for a score of one, "not very much at all" for a score of seven. Low scores represented a desirable response, high scores represented an undesirable response, and the scale mid-point of four represented a neutral response.

The unstructured part of the interview consisted primarily of probing following each of the ten questions. Interviews were conducted by the WMAHEC evaluation staff and were tape-recorded and transcribed for subsequent analysis.

Clinical Problems Encountered in the Preceptorship Setting

The interview item used to explore this topic was as follows:

> To what extent did you learn about the kinds of clinical problems encountered in an office practice as compared to a hospital setting, including mechanisms for ensuring comprehensive and continuing care?

Responses by numerical category for this item were not tabulated because some of the students who were interviewed served their electives in hospitals or clinics rather than office. However, extended interview responses indicated that many students did seem

to gain an improved understanding of clinical problems encountered in an office practice as a result of their participation in WMAHEC electives. Responses which illustrate this type of benefit were as follows:

> Student #01: I spent a good deal of time in the preceptor's office, it was every afternoon about 11:00 on, five days a week. I saw a good number of patients, he has a very busy office practice. (The problems we saw) varied, we saw some internal medicine problems, did obstetrics, we saw mothers for prenatal visits, a lot of follow-ups for people that had been in the hospital for various things. It was distinctive because there were so many different things.
>
> Student #02: The type of clinical problems I worked with were minor clinical problems such as colds and small cuts that were sutured and perhaps the sutures were being removed. There were problems an internist or gynecologist might see such as follow-up of heart problems or respiratory problems or pre-natal checks or pediatric problems such as immunizations, well-baby checks, and other such out-patient type of activities.
>
> Student #03: I was very surprised at the number of patients that came in with what I considered to be very minor problems. A lot of low back pains, a lot of aches and pains here and there, erotional kinds of problems, depressions, insomnia, the kinds of things that go on in the everyday world but you don't see in acute hospital settings. He did have patients come in that were acutely ill that we would treat and if they were severe enough of course we would hospitalize them. I would see patients with him and observe the procedures . . . By the end of the week I was coming up with my own feelings of what the patient had and how to treat them, then he (the preceptor) would review that with me and go in to talk to the patient briefly and make any changes that needed to be made.
>
> Student #04: What really struck me about it down there was that if you have a kid that comes in that you're thinking might need some kind of hearing test or kind of exam dealing with how they are doing in school, whether they are hyperactive or something like that, you would have to call into play people working in the area, such as a social worker that happened to be working there at the Division of Family Services. I think I learned more about the actual various divisions and departments for health care services in Missouri from being on this rotation than from probably a whole textbook.

Student #06: He pretty much runs his own family-practice clinic and he does a lot of small general surgery, like D&C's, appendectomies, things like that, nothing in major surgery. I would say he's a really well rounded family practitioner.

Student #07: I saw the importance of really taking care of these people that come in, small problems that could lead to a lot worse problems. We saw a very disproportionate people with obesity.

Student #14: The majority of my time was spent in the hospital and as far as seeing out-patient films, I did not see any of those, most of the experience I had was in-patient. The different things that we saw in the radiology department in the hospital are as various as one can imagine, all the way from just minor peptic ulcer disease to full blown tumors found within the cranial vault, or deep vein thrombosis. It was very diverse.

Student #19: Besides doing nephrology, Dr. _____ is a general internist, so I saw a wide variety of problems. We particularly had a lot of cancer patients, and Dr. _____ was also into metabolic and nutritional assessments, which we do with a series of graphs and calculations, so we had about 12 patients in the hospital per day as a rough average. And we would do nutritional and metabolic assessments on approximately half of them, so a lot of rounding time was taken up with calculations and urinary and serum measurements. We have a lot of hypertensive patients, I saw a lot of that because those are usually referred to the nephrologist. We saw a lot of diabetics because many of them get nephrology complications from their diseases.

Student #21: He is in the office about 4 half-days a week and I was with him a few times. Generally the things he saw in his office were follow-up to the hospital, or follow-up of patients he had been seeing a long time like yearly exams, follow-up of heart attacks, hypertension, things like that. So his office was more a follow-up and once or twice a day he would have a new patient he would have referred to him for a consultation. For example, if it was a GI problem that somebody felt didn't need to be worked up in the hospital, then he would see the patient in the office.

Diagnostic and Therapeutic Techniques in the Preceptorship Setting

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship teach you the diagnostic and therapeutic techniques appropriate to an office practice?

As in the case of the previous items, numerical responses for this item were not tabulated due to the fact that many of the students did not serve in an office. However, extended interview responses illustrated by the following quotations again indicated that many of the participants learned a good deal about diagnostic and therapeutic techniques appropriate to an office practice:

> Student #01: His office (the preceptor's) was for he and his partners, and they had also a diagnostic laboratory there. He gave me a tour of his office and I saw his lab in the back, he showed me the kinds of laboratory machines, he showed me what is reasonable for small clinics to have, CBC machine, electrolyte machine. He kind of explained to me what they could do there, what was practical for them to do there, and the things that they had to send out. He also had an x-ray department, a technician that could take films right there for him. He had some ultrasound equipment for patients that wanted some sort of diagnosis. Those are the main things that I remember seeing on the tour of his office.

> Student #03: I think he (the preceptor) helped me appreciate the need to select the appropriate tests and not the extravagant ones, like down here we might order 5 or 6 routine tests when we saw a patient, however, up there we might limit ourselves to one CBC or one monospot, something like that to make the diagnosis. I think that was good in giving me a feel for really needing to select the appropriate test, I think the cost effective aspect of it was pretty important.

> Student #04: If you have a kid coming in and don't have a lab in association, which we didn't, you have to write down which studies you want, then you have to call over so they can manage to get into the lab and get the results back to you somehow. X-rays are the same way.

Student #04 cont.
I remember we would, for a patient we suspected of having pneumonia, have them go over to the hospital to get their x-ray, then they would bring the actual x-ray back with them, then we would take them over in the evening. It was set up between you and the hospital, to know what was going on, so no one would get mad at another. We really worked together.

Student #06: In an office setting a lot of times you really don't have the room or the money to provide a lot of the diagnostic things that a hospital could supply. Your lab doesn't cover a whole floor, it's just one single room. You learn to depend on yourself to do a lot of the diagnostic tests. You're not able to refer, so you do x-rays yourself, you don't send down a CBC to a lab, you do it in the office yourself. It really makes you think for yourself, because in a hospital setting I tend to get a little lazy, maybe send down to the lab and let them do the test, whereas in an office setting, you couldn't send it down to anyone else, you had to do it yourself. It really makes you more responsible and self-reliant . . . When I started out, I didn't really understand how those tests were done, and the doctor let me watch and the technician let me do a lot of stuff. But I had never really done these things at TMC, I didn't really have a deep understanding of the mechanisms of a CBC or UA, I really wasn't able to know how to position the patient for an x-ray or do any of that, and they let me do that stuff myself starting the second week. And I feel that's really good because I think a future doc needs to know how to do that stuff.

Student #10: I think that what was emphasized the most was that in an office setting you do not have the time to go into detailed histories and physicals, which does not mean that you leave out important or pertinent things, but that you need to know which steps during your physical exam you need to concentrate on, which you can delay, the kinds of lab tests you need to do just on patients' presenting signs, because you are limited in your time during the office hours. We discussed a little bit about the machinery and tests you need to have in your office, in a basic private practice.

Student #14: As far as the radiologists teaching me the various diagnostic procedures, they did a fairly good job as to what types of film would be appropriate to take for a patient with a certain type of clinical history. The value of one specific film compared to another was explained very well, and also the dangers and complications of certain procedures in a patient who would present a particular clinical history. I also learned about what types of film you would not want to do under those circumstances because of the complications that would follow. These things were very well pointed out by the radiology group that was down there. They allowed me to read the morning films and went over the films with me. When patients were being fluoroscoped for either upper or lower GI tracts or what have you, I participated in that. They would ask my opinion on the structure of the organs and ask for my viewpoint, and if I picked up something they went over it with me, if I missed something they pointed that out.

Student #21: They had their blood work done at the office, the patients all had it done there so that when they came in the work was available to the physician when he saw them. The doctor does a fair amount of proctos in his office, for the initial evaluation of somebody with diarrhea or change in bowel habits, or something similar and chest x-rays are done and interpreted there in the office. It was a little bit more blood work and chemistrys than you see in a small office because he was in a bigger group practice and they had their own blood chemistrys available, otherwise it was basically what you would do in another office.

Learning to View and Treat the Patient in Family and Community Context

The interview items used to explore this topic was as follows:

> To what extent did the preceptorship teach you to view and treat the patient in the context of his family and community?

The mean score for this item was 2.6, well in the direction of the "very much" response category. Additional information indicating that many of the students benefited from the elective in terms of learning to view and treat patients in family and community

context was found in the following illustrated quotations.

> Student #01: Probably a lot more than at Truman, we saw patients come in with their families. Almost every patient was accompanied by someone, particularly children. You could see the family and what they had to say about the illness and their reaction to it also. I think I remember talking to one or two patients about something like that. Families there were very interested in what happened to someone in their family who was ill, and what they could do to help, what service they could be to this patient.

> Student #02: I think the family was brought in to discuss the health of the patient nearly all of the time, and perhaps more than we sometimes see in the city, the family did get involved in health care. I think it involves the fact that the preceptor knew the family and could get an idea, for example, whether perhaps the wife could help the husband in his treatment regimen.

> Student #03: This was another one of the best things in the preceptorship. At Truman where we do most of our training there are not much family ties and family involvement, it is very limited. We might see and treat patients and have them in the hospital for two or three weeks and never even know they have a family. However, out there the family was usually along with the patient and was vitally interested in what was going on.

> Student #04: You just have to understand the social customs, what people think is important to them. To say 'Why don't we wait until summer to take this kid's tonsils out?" isn't good, because they (rural people) do all their work in the summer. You might as well take tonsils out in the winter. Just a whole different set of cultural things that you have to understand. I saw basic problems that were something that was new to me because I have not come from a rural background.

> Student #06: Well, in _____ it's really different from Kansas City because the family's more close knit and you never see a patient in the hospital without most of the family there. I remember one instance where the family members didn't even leave the hospital: they slept on the hospital couch on the front lounge. In a case like that you really deal as much with the family as you do with the patient. You learn to understand their worries and their affairs, both financially in regard to what the bills will be, how the patient

is going to be, if he is going to get well, if he is going to die, and you learn to handle this. Here at TMC you seem to just have a patient, and there is never any family around, whereas at _____ you have to deal with both factors and it gets emotional sometimes. The doctor gave me a lot of privileges that way, he more or less turned his patients over to me whenever he was there and even when he wasn't there. He gave me the responsibility to be able to talk with the family, just as freely as he would. In so talking with the families, I really learned that there is more to medicine than just the physical health, there are a lot of emotional factors that come into play with a family in treatment of the patients.

Student #10: The doctor was very aware of his patients who could not afford an extended hospital stay. He knew their financial situation and took that into account, which didn't mean they were shortchanged for medical care, but he was trying to combine the most effective means of treatment with cost effectiveness. There was one particular gentleman who was in after having a rather extensive myocardial infarction and developed some signs like a spinal block, and I had the chance to discuss with his family some of the things we were thinking about as far as neoplastic diseases. I discussed with them what it would mean for him, the problems he was having accepting what was going on.

Student #12: I talked to a lot of families, a lot more than I do here at Truman. At Truman we tend to just see the patients who don't have a lot of family support. But in _____ it was different. There were families and they were around a lot, they were interested and their relatives cared. I would talk to the family pretty frequently because I would be there when they were there and the doctor would be busy or gone in the afternoon, so I would get to talk to the family quite frequently by myself.

Student #15: We had a lot of home dialysis trainees, and there were people who were on limited care dialysis, and there were the full-care dialysis patients. Just taking a member out of the family and putting him on a dialysis for 18 hours a week really affects the whole family, and their job status. We had an eleven year old boy who was trying to go to school and was a good candidate for home dialysis. We were teaching his mother all the different meals he could eat, and all the foods that he could not eat. His father was the main one who was involved in his dialysis, teaching him how to draw blood, how to stick himself and all

Student #14 cont.
that, and what to watch for when he got sick, just to make sure the kid had a normal life as much as possible. Dialysize him at night instead of him missing school.

Student #16: We had a lot of chronic disease like asthma which really took a big toll on the family, because a lot of times they were incapacitated for a while, couldn't work, and that was a big social problem. Sometimes even placement was a problem because they didn't have anywhere to stay and their disease was so bad that they had to figure out where to stay such as a nursing home, some place for them to stay after they got out of the hospital. So we dealt a lot with relations with the family and community organizations to get the people rehabilitated and back either working or independent living by themselves or some place where they could stay. I frequently interviewed a patient's family by myself down in _____, a lot of people are farmers and a very big family unit. They are all very involved in the patient, and you extensively involve yourself with the family of every single patient. Every day I would talk to the patients' families, that was a part of the routine, and the preceptor really stressed informing the patient's family about everything down there. You had to sit down and explain so you didn't get bothered later at night when the family didn't know what was going on. We have to keep the family informed, and that was one big thing I learned down there.

Enhancing Interviewing and Human Relations Skills

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship broaden and enhance your interviewing and human relation skills through experience in providing care in an office setting?

Again, numerical responses were not tabulated because some of the electives were not in an office setting. However, other interview responses illustrated by the following quotations indicated that many of the students improved their interviewing and human relations skills through participation in the WMAHEC elective program:

> Student #03: I think it was very advantageous to be on a preceptorship because I saw a tremendous volume of patients and they had such a wide variety of problems, many of which were new and I had never dealt with before.

Student #03 cont.
There were patients who were illiterate but were interested in getting themselves cured and for the most part were compliant with whatever you decided. That was a great experience in interviewing and relating to patients. Here at TMC we have the opposite situation, so I think I gained a lot.

Student #06: I picked up a lot of things at _____ with the help of my preceptor. He taught me how to sense when a patient really wasn't telling me the truth. Sometimes a patient will have an underlying disorder that they're a little ashamed to tell you. I found that you are able to talk to a patient on a person-to-person basis rather than a doctor-to-patient relationship. I think it's really important because a lot of people are really afraid of doctors. My preceptor taught me that one of the main things you need to do is gain the trust and confidence of the patient, and one of the ways to do it is not to talk down to them, to talk on their level. I was able to watch the doctor when he was with patients and when he turned me more or less loose by myself, so I had a chance to really practice what I learned down there.

Student #07: I think that the experience did me good in that I met a lot of new patients, probably 20 or 30 new patients a day I came in contact with by myself either doing a physical or doing some sort of thing like taking blood, giving an injection, or doing a pelvic. This kind of experience helps you gain a lot of comfort and confidence in yourself and your ability to answer questions right without letting the patient become too anxious.

Student #10: You're coming into a kind of close community. Although everyone was very friendly to me there, it put me in the position of having to put the patient at ease, being able to complete an interview without leaving out important things because you are uncomfortable yourself. I think it helped me to be responsible for seeing the patients when they first came into the hospital because it gave me a chance to acclimate them to me. Just the interviewing itself was good because there were several different people which is not to say that people from our city hospital are fundamentally different than people from rural settings, but they are, in your approach.

Knowledge of the Referral and Consultation Processes in a Community Setting

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship provide knowledge through experience of referral and consultation processes in a community setting with multiple and varied health resources?

The mean response to this item was 2.5, well in the direction of the "very much" response category. Additional interview responses which indicated that students gained knowledge of referral and consultation processes are illustrated in the following quotations:

> Student #01: There was a lot of communication because he used mainly the same physicians to refer to, he would talk to them very frequently about this patient or that patient and at the same time get a follow-up on everybody he saw. I also know that if he didn't hear about a patient he made a point of calling and finding out what happened to the patient. It seems like I got a follow-up on just about every patient that he referred somewhere.

> Student #02: He would often call himself if he didn't hear within a few days, and we'd get a complete record from the hospital in K.C. when the patient was discharged. He knew the physician he was referring to and had worked with them before. Generally, for each different problem, he referred to a different physician in a different hospital.

> Student #03: My preceptor recognized his limitations in dealing with a lot of problems. If we had someone come in who was pregnant, he did not practice O.B., so he would immediately refer them to someone who did. If they had a pulmonary problem which he was not knowledgeable enough to follow long-term, and give them good care, he would refer them to a pulmonary specialist. If they had some emotional or psychological problem, which a number of cases did, we set them up to talk to the psychologist he was working with and referred them to him. There was quite a bit of dialogue back and forth between the preceptor and whoever he was consulting.

Student #06: Referral was the name of the game because of lack of facilities. We used the University of Missouri - Columbia for various things but whenever we could we tried to use more or less a local specialist. My preceptor would say, "When you come back from Columbia, call me, I want to know what they said, I want to know if I can help you do what they said to do," that kind of thing. If there was no visit, he would at least call, and he always knew what was going on. There was a good degree of interchange between consultants and referring physicians, and I think that's really important because when your patients come back home, you are going to have to see them again.

Student #10: The doctor was consulted when any of the other specialty practice physicians had a patient in with a problem that he thought encompassed the field of internal medicine. The doctor saw the patient, wrote recommendations just like a consultation would be done here, basically went by to see patients during their hospital stay, with the understanding that when they were released they were to be released back to their original physician. After the doctor performed a consultation he would call the physician that he had the consultation for, and would do that after each consultation, saying, "This is concerning so and so, this is what I found, this is what I think, I've recommended the following on the chart."

Student #12: The doctors I was with, being pulmonary doctors, got a lot of referrals from small towns in the area. The doctors would get a call at their office, occasionally they would get a letter, and then the patient would be sent up with their x-rays. Then whenever we discharged patients we would send a copy of their discharge summary to the recommending physician.

Understanding the Role and Lifestyle of a Primary-Care Physician

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship help you understand the role and lifestyle of a primary-care physician in the total health care system of a community?

The mean response to this item was 2.7, well in the direction of the "very much" response category. Additional interview responses which indicated that students gained understanding of the role and lifestyle of a primary-care physician are illustrated in the following quotations:

Student #04: This man was particularly active in the sports programs in the city, especially in the summer. Part of city government influenced the sports programs, so he was on the board for that kind of thing. From what he would say, people expect doctors to get into community events and to be a part of the community, more so, I think, than any other individual.

Student #06: He was really good to more or less take me with him every place he went. He has off Wednesday and Friday afternoons and he is really an active person in the community. He has an active part in the community bank there, he owns several land holdings, there, and is just a _____ active community member all the way around. He took me to a board meeting one time, he is really active in the athletic field, he is more or less the team doctor for all the athletic events that happen in _____, and he took me to some football games with him.

Student #09: This is where it was kind of neat. My preceptor had been the team physician for the local college football team for 32 years, so he knows everybody in town, everybody on the staff of the college. I went to two football games and a basketball game, and played the athletic doctor, which was great. I hadn't been in a locker room in years and it was great. He is well liked, well respected, he's active in all the clubs around town, especially the Rotary Club. I went to some Rotary Club meetings. He fit in well with the community. It was great going to the football games and walking down the sidelines, getting to go back to the locker room.

Student #10: He was very much involved in community affairs. While I was there he was appointed to be on the board of one of the banks, and it was interesting for him because he had never had to work with figures and he always made jokes about physicians not knowing what they were doing. He was concerned and was going over basic accounting and things for that. He was also involved in some of the planning of community committees for basic layouts in the community and some other groups. There was a time when he even sang in the choir at church. So for him there was more than just practicing medicine.

Student #16: I went over to his (one of the preceptors) house for dinner a couple of times and we went to a couple of continuing education classes they had down there. Both of the preceptors were really obsessed and compulsive and spent a good many of their hours at the hospital or in their office and worked very

Student #16 cont.
hard. Looking at their lifestyle, I don't think I would want to live their kind of life. I went to a quarterly staff meeting and I was involved in sitting in on that and they had a couple of lectures throughout the month on continuing medical education, and they had speakers come through, and I heard a few of those.

Learning about the Skills, Roles, and Capabilities of Office Support Personnel

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship help you to learn through personal experience the skills, roles and capabilities of such office support personnel as receptionist, nurses, etc.?

Numerical responses to this item were not tabulated because some of the students did not serve in office-based electives. However, other interview responses indicated that students assigned to office-practice electives did learn a good deal about the skills, roles, capabilities, and importance of office personnel. Illustrative quotations supporting this conclusion included the following:

> Student #01: I spent a lot of time observing these people, the people in his office. I can't really say that I sat down and talked to them about their roles, or even much about what they did. I learned just by observing them. Mainly I saw the interactions between the nurse and my preceptor, how she helped him out and what she would do with the patient and where she would let him take over.

> Student #03: He had an office staff of five girls, two receptionists, two nurses, and a lady who did the books, and I had quite a bit of interaction with them. From the nursing standpoint, when one of them was sick for several days I did a lot of the nursing type of things to help out, taking blood pressures, giving treatments on various things, that kind of thing.

> Student #04: You have to get along with the people you work with, you have to have a nice fluid way and an adequate way of treating patients, and that includes everything from billing to actual nursing care, shots, allergy

Student #04 cont.
testing, the receptionists, and other things I had never known, I had no way of knowing before this.

Student #05: I really didn't appreciate a nurse, bookkeeper, or receptionist until I went down there. You take all that stuff for granted at TMC. I found out with this doctor that in order to really run a good practice and make a practice work, a good nurse is really worth her weight in gold. And so is a good receptionist and bookkeeper. Bookkeeping and receptionist things, the doctor doesn't have time to do, he's with a patient. The doctor had a really fine nurse down there. It just seems like the office and patient relationships run a lot better when you have a staff that gets along well. I'd say I definitely got a better understanding of the really important things of an office support personnel.

Student #08: Well, these are invaluable people for a practice, to make it go. Without an office nurse to coordinate everything for you, you would never get out of the office at night. Their (office staff) role as health care providers and even receptionists is unreal, the medicine that they help practice over the phone is unreal, they are very important people. Social workers and other people in the hospital also are important. You don't have hours to spend on the phone yourself so these people are important in that capacity.

Student #09: In a clinical office practice nurses are absolutely essential because they do the initial workup, take the blood pressure, the chief complaints were taken care of by them, etc. You just have time to start in with the problem, if they weren't there you would be much slower. My preceptor, being an allergist, has six or seven people working on preparing shots because he has a voluminous allergy practice. Without them his office wouldn't run, just because of the volume of business he does. It was a smoothly run office and I was impressed with how it was run.

Student #19: I got to know some nurses which was a good experience. And I learned how technicians can run dialysis, which was new for me. I had thought they all had to be R.N.s. I learned how important R.N.s are because they are really the supervisors of the floors. I learned about the surgical O.R. because I went in on a surgery so I learned more about the support there, the annesthesiologists, the scrub nurses and the circulating nurses.

> Student #21: His receptionist was a major part of his practice, it seemed. She would take all his calls initially, and if he had messages where he didn't directly have to talk to them, she would take care of that. If he had to remind himself of what happened to a patient last time they were there, he would call her at the office if he was at the hospital and say please pick up the chart for me and tell me what went on. So the receptionist was a big part of his practice, and was a real help.

Gaining Familiarity with Business and Monitoring Aspects of Medical Practice

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship expose you to the business and monitoring aspects of medical practice, such as bookkeeping, records systems, appointment scheduling and payment mechanisms?

The mean score for this item was 4.7, indicating that many of the students did not receive much exposure to business and monitoring aspects of medical practices. Of the nineteen students who were interviewed, five checked response category seven ("not very much at all") and five more checked categories five and six in responding to this item. However, some of the students did report substantial benefits in terms of exposure to business and monitoring aspects of medical practice, as indicated by the fact that six checked categories one, two, or three, and by the following illustrative quotations:

> Student #03: I had access and was exposed to the whole gamut of business practices, from when staff scheduled the patients to seeing how they billed the patients, filling out the insurance forms, seeing how they figured out the books at the end of the day, seeing how they figured the payroll, seeing how the physician dealt with the other tenants of his building, and how he dealt with his corporation. It was really good.

Student #05: In the very beginning he showed me exactly how they ran the billing system, appointments, etc. They have a big clinic system and it is computer billed. They had a computer technician and a bookkeeper. The preceptor showed how he set up his office to be a little more efficient than he used to have it, he had the bookkeeper filling out all the insurance forms, now he has the patients filling out their own insurance forms.

Student #06: I didn't realize how many books a doctor has to keep. There is always somebody coming down from an agency checking on you. You have to keep records of the drugs you dispense, records of your syringes, linens, utility bills, insurance, tons and tons of bills that a doctor has.

Student #07: We didn't sit down and talk about it, but just from what I had observed they had a very accurate monetary system, everybody was ready to write things down just as they were done, how much that was and everything. At the end of the visit they were told how much they used up and that was run to his advantage. His wife handled the materials and things. They bought generic drugs by the big boxload and kept them on their shelves or kept them stored.

Student #09: He had a good bookkeeping system, I remember from my Southwest Missouri trip I took a few years ago, they were talking about clinical office practice as far as the bookkeeping and accounting system goes. It's very important because your office overhead in a small community is expensive with the ancillary help you get and office calls aren't that expensive. His record system was the classic file room and the folders, and the office coordinator took care of the bookkeeping and the payment mechanisms. He had two receptionists out front that took care of the appointment scheduling and maneuvering patients around, if he had one that needed to be seen first.

Student #10: He had a discussion with me about basic things you would need in order to go into private practice and how he kind of stumbled onto what system he has now by trial and error, because there wasn't anyone really for him to talk to about it, how to set up things. We talked about things such as having an accountant, like a medical management firm which he does have now, to help you design what kind of slips you want to make appointments on, to various records, how you want to arrange records. Now he

has a huge alphabetical filing system in his office. We talked about how many people you need to help you in your office, and if you are just going to need an RN or nursing assistant, if you can afford to have a receptionist or nursing assistant who can do other things, and have an RN to go with you on rounds so the office can keep functioning until you are there to see patients. We discussed the importance of having a good lawyer, not necessarily having a famous one but just a good lawyer who could explain things to you.

Student #15: I learned a lot about it, especially how to set up charges, how to file insurance claims appropriately so that you indeed get paid for the work that you have done. Also appointment scheduling, that's a problem with this kind of practice, you have to deal with it on a daily basis almost. Many of their elderly patients couldn't accept appointments, and many of them were still walk-ins, they just refused to accept an appointment that you made for them. My preceptor had a Certified Public Accountant to do his bookkeeping.

Understanding of Preventive Health Care Practices in a Primary Care Practice

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship help you develop a better understanding of preventive health practices and their utilization in a primary care practice?

The ~~mean~~ score for this item was 3.6, indicating that respondents as a group were slightly more affirmative than negative. Ten respondents checked response categories one, two, or three in answering this item, while four checked categories seven, eight, or nine and five checked the mid-scale value of four. Respondents who were positive about their electives in items of understanding preventive health practices in a primary-care setting offered the following illustrative explanations:

Student #02: In prenatal checks, we'd follow the mother along to make sure that she was progressing well and was doing everything right. Immunizations were very much stressed in small children.

Student #13: The elective helped me understand what a big difference preventive health measures can make.

Student #16: We were involved a lot in (prevention of) smoking, because that is a big cause of pulmonary problems and lung cancer. There was a phenomenal number of people we consulted to quit smoking, including preventive health care . . . We worked closely with the public health nurse in Springfield. We examined people who had picked up TB or hepatitis to determine whether they could go back to work.

Understanding of Public Health and Environmental Factors

The interview item used to explore this topic was as follows:

> To what extent did the preceptorship provide you with an understanding of public health and environmental factors in relation to the private practice of medicine?

The mean score for this item was 3.7, indicating some of the students felt they had gained significant understanding of public health and environmental factors in medicine, but others felt they had not. Eight respondents checked response categories one, two, or three, but four checked scale mid-point of four, and three checked categories toward the "not very much at all" pole.

In addition to the preceding quotation from student #16, who discussed public health along with preventive medicine, student #15 provided an illustration of understandings regarding public health acquired through the elective program:

> I learned that dialysis patients could get their medicine at cost instead of having to pay pharmacy charges, and that there are a lot of things the Kidney Foundation will do for these patients.

Exposure to Rural Practice

As mentioned above, one of the goals of the WMAHEC-supported electives is to introduce future physicians to medical practice in a rural setting. It is hoped that this experience will help persuade future physicians to practice in rural areas, which tend to be medically underserved compared to large urban population centers. Although it is difficult to arrange electives in severely underserved rural areas precisely because there are few physicians there in the first place, it is hoped that experience in a rural setting or a small or medium-sized city serving a rural population will help future physicians learn about medical practice in these settings and will encourage them to consider locating in similar communities.

Evidence from the interviews indicated that a number of the students participating in the electives did observe and learn a good deal about primary-care practice in a rural or rural-serving setting. Aspects of rural practice most frequently commented on in the interviews included the types of medical problems encountered by the physician, referral patterns involving rural areas, small towns, and large cities, the physician's role in a small town community, and physician-patient relationships in a rural or small-town location. In a few cases, the students indicated that participation in the elective program helped persuade them or confirmed decisions to consider establishing a medical practice in a rural-serving location in the future. In addition to responses already quoted, some of the understandings and observations which the students cited along these lines are quoted on the following pages.

Student #01: I think I would like to be in a small town, if I thought I could have enough business. . . .I think that for students who came from a larger town, it is a very important part of our education to go to a small town. I think it was one of the more worthwhile months I have spent in my tenure here. It's probably particularly good for an upper level student . . . (because) I was given more responsibility for patients down there than I had ever been. They didn't have any residents down there, so I was like a resident. I stayed at the hospital all the time, calls were directed to me first. They would call and ask me what to do. I had to make the decision about what I felt confident doing or what I felt like I had to call my preceptor about.

Student #04: It (the elective) was very valuable for me as an introduction to rural areas. I had considered and am still considering practice in a rural area. You read about it, and it all sounds well and fine, but until you are there and are actually presented with a problem, it doesn't really hit home. Basically, I think you need to see the area, not just read about it.

Student #07: The elective was confirming for my decision to practice in a rural area in the sense that I saw what was going on and I felt it made me feel like I want to go down there and do a better job. I know that there are primary physicians in _____and in the immediate area that are fine, fine physicians, and they are doing a great job, but it (the elective) also showed me that there is still need for physicians in that area and a lot of areas . . . .It (the elective) gave me positive feelings about going into rural family medicine.

Student #18: I had sort of decided earlier to locate in a rural area, when I had another elective down in _____. I really liked it down there, I liked the community. That was the first time I had ever been out of a big city, and I sort of liked it compared to a big city.

Student #19: I definitely want to go back to _____. The good thing about it (the elective) is that it convinced my husband that he, too, would like to go to _____. He had never thought before that he would want to be away from a big university because he likes academic medicine, but now he can see that being in a small town does not mean your medicine practice is suboptimal, that your practice can be very good and you can do a lot of things you wouldn't otherwise get to do in a large center where there are too many subspecialties and physicians.

Problems in Administration of the Electives

One of the main reasons for conducting the interviews was to help obtain information about the functioning of the elective program and ways in which it might be improved in the future. Students who were interviewed were asked to describe the kinds of problems they encountered and the steps that might be taken to solve them. Problems will occur in the administration of any program, particularly one such as the elective program that operates over a wide geographic area. Most of the problems cited by the students were minor ones unique to the context of their electives, but two required mention at this point in this report because they bear on the general function of the program.

The first is an occasional problem involving selection and screening of the preceptors. We know from the questionnaire and interview data described above that most of the preceptors have worked effectively to make the elective experience a successful one for the students, but in a few cases preceptor supervision was less than adequate, as illustrated in the following quotations:

> I think it's real important to screen the doctors really good. This guy (the preceptor) was having an awful time with his life. Here he was going through all these court proceedings and stuff, and he didn't need the extra pressure of having somebody new around. There is no way he should have been given a student in that month. The last time students went there, there was a year three student and a year six student. The year three student spent all his time with the year six student. They taught each other stuff the whole time, and the year three never spent any time with the doctor. So I think that's why no one knew before that he was doing a bad job or that his student didn't really like him.

Related to the screening task is the larger task of maintaining good communications concerning opportunities available in the WMAHEC elective program and providing students with early information about the most suitable locations. A problem regarding this aspect of the program was described by a student who said that:

> I heard about the elective (location) from a student, and I attempted to get it, but I was turned down. I was told that the doctor only takes one student a year. So I said OK. Then a girl came back in November and said that the doctor wanted as many students as he could get, and would even like one every month. So I reconsulted the school and again was told he only takes one student a year. They said I couldn't call him directly but I went ahead and called him and he told me to go ahead and come there. It was kind of a hassle, it really was. I was kind of disappointed that the school said the location wasn't available when it really was available. When I got down there they were equally upset with the school because they want students down there and they can't understand why more students don't come. . . .In reality it's a very good elective, so the problem must be some kind of lack of communication.

It should be emphasized that the situations described above were isolated and atypical, and that they do not necessarily indicate systematic malfunctioning in screening and communications processes in connection with WMAHEC electives. On the other hand, occasional emergence of problems of this kind does indicate that attempts to improve screening and communications should be continued on a regular basis.