offset by increased telephone cancellations. Although uncertainties in clinic scheduling may be reduced, it does not appear this system is effective in enhancing patient attendance. It is also expensive in person hours and postage to mail reminders to every scheduled patient. With a low overall no show rate as experienced in the Duke-Watts Family Medicine Center (eight percent), an alternative approach of contacting only patients who failed appointments was undertaken. Although the postcard reminder showed no improvement in patient follow-up, almost half the patients who failed appointments did visit the clinic within the succeeding two months. This suggests that a small number of patients are lost to follow-up, about four to five percent of scheduled returns.

Patient compliance with requested remote appointments did not appear to be improved by postcard reminders. Again, the overall compliance of 60 percent, while less than optimal, may not be an unreasonable expectation for a primary care practice. Patients who require less intensive medical surveillance are likely to perceive less need for return visiting. So, although the concept of the mailed reminder is appealing, it appears that in a family practice clinic with good patient attendance behavior, it adds little to the effectiveness of the appointment system.

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Family Practice Residency-Community Clinic Linkages for Physician Exchange

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The issues of community clinic viability, physician training and practice in underserved communities, and family practice residency outreach programs are interrelated. With the expansion of federally funded clinics, primarily through the National Health Service Corps (NHSC), and the pressure in many states to have family practice residency programs directly involved with service to underserved communities, the issue of what formal (and informal) linkages should exist between the two frequently arises. In an effort to address the problems associated with rural professional isolation, to place residency graduates in rural clinics, and to increase medical student preceptorship teaching, a plan for residency faculty-community physician exchange was developed. This project now links three rural clinics in northern California with a nearby family practice residency program.

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Description of Exchange Project

The initial rural site was Guerneville, California, a town of approximately 3,000 people in the northern coastal mountains approximately 20

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miles from Santa Rosa, California. There is an accredited family practice residency program at the Community Hospital of Sonoma County in Santa Rosa.

Guerneville was approved as a NHSC site in June 1974. This meant the town was medically underserved, and was eligible for assignment of federally funded physicians as well as other health care providers. The clinic wanted a physician to start practice quickly.

A third-year NHSC obligated Santa Rosa family practice resident expressed strong interest in the clinic. An arrangement with the clinic, the individual, and the residency program was worked out so that this individual could take all of his elective time (approximately six months of three days a week, usually taken in the third year) later. He was assigned to the clinic as a physician-provider in January 1975, six months before the completion of his residency. He then took one day (8 hours) a week of elective time for the next 18 months. At the end of this period (July 1976), he had successfully completed his electives and was eligible to sit for the family practice board examination. This arrangement was approved in advance by the American Board of Family Practice. In exchange for being gone from the practice for three days, the individual worked an extra four hours a week in the clinic, and was replaced for four hours a week by a faculty member from the residency program. The faculty member had had previous experience in rural practice. During each week's visit, the faculty member saw patients and in addition audited the medical records to review the quality of care. The faculty member usually brought one or two medical students and occasionally a family practice resident with him for each clinic visit.

After finishing all electives in July 1976, this arrangement was continued as a basic exchange of roles one half-day each week. The residency program faculty member continued covering the clinic (usually with students) one day each week. The NHSC assignee, now board certified in family practice, began teaching one half-day each week in the family practice center of the residency program. This teaching involved family practice residents, family nurse practitioners, and medical students. No additional or outside funds were necessary. Both teachers were well satisfied with the exchange, as were residents, students, and patients.

A similar exchange project has recently been started at two additional sites: one at Geyserville, California, a town of about 1,600 people 30 miles north of Santa Rosa, and one at Clear Lake, California, a town of approximately 5,000 people 50 miles northwest of Santa Rosa. At Geyserville, the arrangement was similar to the initial one at Guerneville, the provider being a third-year family practice resident starting his NHSC assignment six months early. At Clear Lake, the arrangement was started directly as a faculty-NHSC assignee teaching exchange, for the assignee was board certified in family practice and was interested in teaching.

Discussion

The advantages of this structured interaction between clinics and a family practice residency program are many, and can be itemized as follows:

Benefits to the Community Clinic/NHSC Site

1. There is potential for improvement in the quality care through the ongoing monitoring of the scope and quality of the health care services of the new providers by a more experienced colleague. This may be based on regular chart audit and/or patient care conferences.

2. An increase in patient care services can be delivered, particularly if the faculty member brings skills that the community providers do not have—such as doing vasectomies. He can initially teach these skills, so that patients may no longer need to be referred. He may also be able to bring out equipment for the day (such as sigmoidoscope or endometrial biopsy cannula) which the practice has not yet acquired.

3. The faculty member may have more experience with management of certain difficult medical problems and thus provide an increase in comprehensive care. The faculty physician may also know which consultants would be most appropriate to use.

4. If the practice is just getting started, the faculty member may provide valuable practice management experience.

Benefits to the Family Practice Residency Program

1. The program will acquire a new teacher. If the clinic physician has completed a family practice residency, the individual will be able to bring new ideas and skills to the program.

2. There may be more referrals for the hospital or residency program, particularly if the clinic is in an area that was not previously in the hospital's "catchment area." This may be an important step in developing a rural (or urban) system of health care in which the residency program plays a key role.

3. The community physician/assignee gets to know the residents and students at the program. The physician may be willing to then serve as a preceptor in the practice for these residents or students. This factor may help increase the number of residents who stay in the area.

Benefits to the Community Physician/ NHSC Assignee

1. If this physician has a strong interest in teaching, it provides a structured opportunity to develop teaching skills.

2. There may be educational benefits, such as learning of procedures, the management of difficult patients, and practice management.

3. It may provide the physician with a better orientation to community, especially for referrals and consultations (particularly if the physician finished another residency program).

4. There is an opportunity for continuing medical education through attending lectures or other learning programs at the hospital.

5. There will be less professional isolation, and the likelihood of satisfaction with the practice and later retention of the physician is increased.

Benefits to the Family Practice Faculty Physicians

1. If the faculty does not have an ongoing day-to-day practice at the hospital's family practice center, it is an opportunity to establish a regular, part-time practice at the community clinic. This may provide a fresh perspective for teaching.

2. The excitement of being involved with a new project is especially important to many faculty who see it as part of their task to help develop new ideas and to put them into practice.

3. There is no loss of student and/or resident contact if the faculty member brings them along to the practice.

4. It provides the opportunity to be involved with the community and to help the residency program deal with the medically underserved populations that may be nearby.

Benefits to Medical Students and/or Family Practice Residents

1. It gives them an exposure to practice in an underserved community which may have been lacking in their training. This is especially true if the site serves a minority population or is in a very rural area.

2. For medical students particularly, it is an opportunity for hands-on medical care (under supervision) of common office problems.

3. Since most students and residents have been very favorably impressed with the clinics, it is quite possible that this experience may reinforce positive attitudes about community clinics, and may increase the likelihood that they will either sign up with the NHSC or serve as a physician provider in the future.

Conclusion

This community physician-faculty interchange has benefits for all concerned. It presupposes a number of factors: the community physician being interested in and eligible for a teaching appointment, the willingness and time of the residency program faculty to undertake new projects, the agreement of the clinic's community board, and the ease of transportation between the sites. In two of our linkages the exchange program began as a special project to help residents start an early practice in a medically underserved community. This may require additional funds. Now all exchanges are on a voluntary basis, and no ongoing funds are needed outside of transportation. It is a model that could be used by many other programs and clinics.

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