C.B.C. Whiteside, MD M.F. Longhurst, MD, CCFP

Establishment of a Community-Based Residency Training Program

SUMMARY

The Department of Family Practice at the University of British Columbia is now addressing the dearth of primary-care physicians in rural communities and, at the same time, attempting to improve the skills required for rural practice by sending its second-year residents directly to rural communities, where they learn experientially under the watchful eyes of well-established family physicians who are not only interested in teaching and learning, but also enjoy the companionship of a young family-practice resident. (*Can Fam Physician* 1987; 33:2751–2754.)

RÉSUMÉ

Le Département de médecine familiale de l'Université de Colombie-Britannique, pour pallier à la pénurie de médecins de famille dans les communautés rurales et, par la même occasion, tenter d'améliorer les habiletés exigées par la pratique rurale, envoie ses résidents de deuxième année en stage dans des communautés où l'apprentissage se déroule sous la supervision de médecins de famille bien établis qui sont non seulement intéressés à enseigner et à apprendre, mais aussi capables d'apprécier la présence d'un jeune résident en pratique familiale.

Key words: education, residency training program, rural practice

Dr. Whiteside, a Fellow of the College, is Kellogg Fellow and a clinical assistant professor in the Department of Family Practice at the University of British Columbia. Dr. Longhurst, a Fellow of the College, is assistant professor and Director of Residency Training in the Department of Family Practice, University of British Columbia. Requests for reprints to: Dr. C.B.C. Whiteside, 690 West 11th Ave., Vancouver, B.C. V5Z 1M1

A CENTURY AGO the small towns surrounded by rural environs of Canada provided an ideal milieu for the postgraduate training of family physicians. But over the years, as medical care advanced technologically and the quest for more and more knowledge became insatiable, the focus of medical training naturally shifted to the specialties. Generalist training became only a prerequisite for additional and, by inference, superior training. These developments left Canada's rural communities bereft of primary care as young graduates flooded the specialties and, ultimately, the cities. The rural communities of Canada have never quite recovered from this exodus of primary-care physicians, and although most of the population base also shifted to the urban milieu, rural communities still suffer from a lack of medical coverage. These communities are now demanding coverage.

The Department of Family Practice at the University of British Columbia is preparing its second-year residents for rural practice by sending them out to assist well-established family physicians who are practising in the rural areas of the province.

Supplying additional medical manpower to small communities is raising the standard of medical care in rural practice while simultaneously improving the quality of family-practice training by providing a more realistic clinical and medical experience for family-practice residents. Established physicians participating in the program are thankful for the additional help, and as part-time faculty of the University, are also finding their interest in teaching and learning stimulating and rewarding.

Discussion

The rural-practice program at U.B.C. began in 1982, in the Queen Charlotte Islands of British Columbia, under the capable preceptorship of Dr. George Deagle. Dr. Don Watt soon followed suit by establishing the program in Bella Coola and Hazelton in 1983. Brentwood Bay, Quesnel, and Port McNeill entered the program in 1984, 1985, and 1987 respectively.

Interest in the program is growing because the arrangement provides a cost-free means of training family physicians. Residents are paid through fee for service on a supervised locum

basis, and the monies coming into the practice for their work cover both their salaries and also the reimbursement of their preceptors for their teaching time.

The program is administered by a faculty co-ordinator, who travels between communities to maintain essential communications and to help resolve any problems that may arise. His responsibilities are, of course, myriad. He helps to establish educational objectives, curricula, and clinical projects. He assesses methods of evaluation and is responsible for on-site work with faculty, as well as faculty development. In addition, he acts as a liaison person with community hospitals. The major thrust of his job, however, is to ensure that the quality of residency training is maintained and keeps improving.

The pursuit of this goal begins with the astute choice of a family-practice resident by the U.B.C. Department of Family Practice. Qualifying residents will have completed the Advanced Cardiac Life Support (ACLS) Training and will become second-year residents in the Family Practice program. Ideally, they will be people who enjoy rural life, and who want a challenging residency experience. It is hoped that they will also be strongly committed to the success of the rural practice program. For all these reasons resident applications for the program are reviewed carefully. The residents selected will be insured and protected by the University, and will also be encouraged to take full coverage through the Medical Protection Association, for as well as being fully insured, they are also fully licensed physicians.

Chart 1
The Learning Environment

1. Clinical work involving one-to-one dialogue
2. Daily chart review
3. Reading
4. Regular seminars
5. Research project
6. Self-assessment modules
7. Clinical rounds
8. Clinical electives
9. Resident Days at the University
10. Academic Month in Vancouver
11. One-week educational leave
12. Regularly arranged viewing sessions (If no one-way mirror or video equipment is available, this is termed a 'double consultation'.)

Their position in the sponsoring clinics is explained to patients and staff before their arrival so that their transition into the community and the practice will be smooth.

Open communication is the essence of the community program, for it fosters good public relations with staff, patients, and faculty, and facilitates the learning process. The experience is essentially a one-to-one apprenticeship program involving, for the most part, three or four practising physicians who alternate teaching time with patient-care time.

Two- or three-minute "corridor consultations" between preceptors and residents occur regularly as participating physicians co-operate in sharing the patient load with the residents while simultaneously sharing their knowledge and experience. Lunchtime may be spent socializing, getting to know the residents and/or practitioners, discussing personal concerns in the practice of family medicine, or reviewing patients seen in the morning office hours. Bi-weekly teaching seminars, usually lasting about an hour, feature common family-practice problems and include rural physicians not directly involved in the program. Role playing is an invaluable method of teaching frequently used here to augment experiential learning. Charts are reviewed regularly with the preceptors, and residents are also expected to attend hospital rounds and to do committee work at the hospital. They are also expected to complete a community-research project to present on Research Day in May at U.B.C. Further details of the learning environment are listed in Chart 1.

The style of learning being taught in the program is based on an experiential, independent, self-directed learning model. Residents receiving training in such an environment must be aware of this basis, but they must also realize that their preceptors are there to facilitate the learning process, and that their presence makes the experience doubly valuable.

It appears that this experiential learning model is an optimal method of teaching family practice. The rural environs expose the residents to a high level of primary-care clinical experience in which to test their mettle. They acquire confidence in decision making and develop good habits of self-directed learning vital to a future rural practice experience. The continuity of patient care that they experience over the year closely approximates what they will see in their own practices and affords a more holistic view of the patient than that offered by an urban practice. This view, it is hoped, positively affects their treatment style by personalizing patient care and reactivating the traditional dimension of primary care delivered by physicians who are not only primary-care givers but also active and enthusiastic members of their communities.

Curriculum

The residents' year covers 52 weeks, of which 39 are spent in a rural practice. The remaining 13 weeks are divided between educational leave, academic work, and elective clinical experience as outlined in Table 1.

On completion of the program, residents are eligible to write the Certification Exam of the College of Family Physicians of Canada. It is further hoped that they will have gained a number of invaluable skills to support them in their ensuing practice of medicine. For instance, good public relations skills, combined with adequate clinical and office skills, will help them to meet the unique needs of the particular practice that they will serve. Co-operating with participating physicians and other community physicians is just as essential as is learning to monitor their personal resources and to use them appropriately. In addition, residents must demonstrate a capacity for self-teaching while learning to make clinical decisions and integrate

Table 1
Annual Program of Rural Practice

Content and Time	Year I (weeks)	Year II (weeks)
In hospital:		
Pediatrics	8	0
Obstetrics	8	0
Surgery/emergency	12	0
Medical diagnosis & critical care	8	0
Ward	4	0
Community based:		
Urban	8	0
Community practice	4	39
Electives	0	8
Academic	0	4
Educational leave	0	1
Total	52	52

management independent of their back-up consultants.

Selection of Residents

Research has validated the experience of the U.B.C. Department of Family Medicine by proving that persons who enjoy living in rural communities are those best suited for practice there. Often, these persons have grown up in similar environs and enjoy the amenities that a rural community offers, such as canoeing, hunting, fishing, back-packing, and small-town life. Dr. Robin Carter, in a recent article, cites a survey made by the Medical Faculty of the University of Manitoba which, he claims, if analysed, "could serve to predict that a family physician who was the son of a farmer or doctor, who attended a rural high school, and who took a rural preceptorship, stood an 86% chance of locating his practice in a rural area." To date, many residents who have completed the rural practice program at U.B.C. have since set up practice in rural communities. These residents have been convinced of the validity of their training and therefore validate the continuing existence of the program and its probable further expansion.[2-9]

Practice Selection

What type of rural practice is appropriate to facilitate such a unique program? The ideal practice is clearly one which is in need of medical personnel, and also one where the clinicians are genuinely interested in furthering continuing medical education through the presence of a second-year resident. Physicians who have a minimum of five years of experience in practice, are certified by the CFPC, have continued their medical education on a regular basis, and are looking for a change are ideal candidates, for they are usually competent, knowledgeable clinicians and prove to be invaluable and committed preceptors.[2, 10]

It is, of course, essential that the physical set-up of the practice provide adequate space for the resident and seven-day coverage of patients to provide continuing comprehensive care. Lab and X-ray facilities must be available, as well as a systemized record system for easy reference by more than one physician. Access to allied health-care workers, such as public health nurses, social workers, and psychologists would also be helpful. The practice must also be flexible enough for the practitioners to realize that commitment to the program will involve an adjustment in patient load and records as evaluation procedures demand; the practice group must also be prepared to identify one physician as co-ordinator of the program, while recognizing that not all physicians in the group may be identified as teachers. Finally, the practice should have hospital-admitting privileges, and, ideally, the involved community hospital should be accredited.

Practice Commitment

Specific teaching responsibilities involve acceptance of the objectives of the University's Department of Family Practice, which incorporate the objectives of the sponsoring preceptor and the resident. Teachers must also accept an ongoing evaluation of their teaching and practice methods as part of their commitment and be willing to supply access to a number and variety of patients to help the resident achieve the program's objectives. Involving the resident in hospital committee work and academic meetings is also part of the commitment to teach. Finally, agreement with the regulations of the Provincial College of Physicians and Surgeons as they relate to teaching practice is essential.

It is also essential, of course, that the community hospital and other paramedical personnel be made aware that a resident will be entering the practice and what his function within the medical community will be. His presence in the participating medical clinic will be explained by an official sign provided by the Department of Family Practice. This sign alleviates patient anxiety about the newcomer. Practitioner anxiety about loss of practice to the new resident may be allayed by an agreement stating that the new resident will not remain in the practice location unless invited to do so by the members of the practice.

Evaluation

And what about evaluation? How can a long-time practising physician be expected to evaluate a new resident according to contemporary teaching methods and paradigms with which he may be unfamiliar? Molineaux's work at the University of Western Ontario validates the use of self as a sound tool for evaluation of residents. Preceptors use U.B.C. clinical evaluation forms daily to assist the evaluation process and document progress. Monthly meetings allow the preceptors and residents to detect problem areas, as well as areas in which the resident is doing well. Formal evaluations are made twice weekly, following viewing sessions, and a biennial-evaluation form is sent to the University twice a year, in November and April. As the program begins in July, the evaluations are appropriately timed to allow for adequate assessment. The April assessment, in particular, allows time for the resident to concentrate on difficult areas before sitting the CFPC Certification Exam.

University Responsibilities

And what about the U.B.C. Department of Family Practice? What are its responsibilities? And how does it facilitate the success of its community-based residency training program? The Department's responsibilities are, of course, multiple and include assessing an instructing physician's qualifications (CCFP or equivalent), his records, and his charts. The Department also evaluates interested communities and their accompanying resources, such as hospitals and other medical support services.

Ongoing, open communication with the participating practices via the co-ordinator and the urban-based faculty is vital to the continuation of the program. An annual faculty-development meeting of all community-based participants serves to acquaint participants with one another so that they may share learning experiences.[11, 12] Intermittent meetings are also held in the various communities to enlighten further participants and their University-centred administrators and interested faculty members. Participants also receive Departmental minutes and have a voice in policy decisions. They are on the list for promotion through the University mechanism and are accorded privileges equivalent to those of full-time academic physicians.

An expository videotape of the program was produced at the Brentwood Bay facility in 1985 and is available to any interested residents and/or rural physicians. An explanatory booklet accompanies the tape and enlarges on the program's finer points. If a prac-

tice is genuinely interested, the Department will make an on-site visit and come to a mutual agreement which fulfills the needs of the practice and of the Department.

Conclusions

A most important feature of the program is that the private practices involved independently support the resident financially. The residents, as stated above, are paid for service on a supervised locum basis, and any surplus monies are used to pay their salary and to reimburse the preceptors for their teaching time. It is hoped that in the future each participating practice will contribute a portion of this surplus to help defray administration costs so that the program can continue to be independent of government support. This independence is bound to make this unique community-based residency training program an extremely popular alternative to centralized family-practice education. ◉

Acknowledgements

We wish to thank all Community Faculty, Resident, University, and Government Officials who have supported the Community-Based Residency Training Program. We also wish to thank L. McMullen for her excellent editing of this paper and Mary Andersen for typing it.

References

1. Carter R. Training for rural practice: what's needed? *Can Fam Physician* 1987; 33:1713–5.

2. Zeterman MR, Stefanu C. Selecting a community for medical practice. *Texas Med* 1977; 73:86–92.

3. Grimes RM, Lee JM, Lefko LA, et al. A study of factors influencing the rural location of health professionals. *J Med Ed* 1977; 52:771–3.

4. Spain F, Woiwode D. Graduate follow-up survey in a university based family practice residency. *J Fam Prac* 1979; 9(6):1108–10.

5. Taylor M, Dickman W, Kane R. Medical students' attitudes towards rural practice. *J Med Ed* 1973; 48:855–95.

6. Copeman WJ. Four hundred and fifty doctors in one hundred and seventy-three underserviced areas. *Ontario Med Rev* 1984; 51(1)9–11.

7. Breisch WF. The impact of medical school characteristics upon location of physician practice. *J of Med Ed* 1970; 45:1068–70.

8. Grattinger JS. A tracking study of U.S. medical school graduates from the first to the second post doctoral year. *J of Med Ed* 1980; 55:647–55.

9. Carter RG. Relationship between personal characteristics of physicians and practice location in Manitoba. *Can Med Assoc J* 1987; 17:128–36.

10. MacDonald PJ, Bass JM. *Characteristics of highly rated family practice preceptors*. Published in 1980 as a thesis for a masters in clinical science as part of the Kellogg Fellowship program at the University of Western Ontario in London, Canada.

11. Fabb WE, Heffernan MW, Phillips WA, et al. *Focus on learning in family practice*. Melbourne: Royal Australian College of General Practitioners, Family Medicine Programme, 1976.

12. McWhinney I. *An introduction to family practice*. New York: Oxford University Press, 1981.

For Further Reading

1. Campbell IK, Chamberlain NJ, Perlman MJ. *Kingslynn Vocational Training Scheme for general practice*. Post Graduate Medical Centre, Gayton Road, Kingslynn, Norfolk: Queen Elizabeth Hospital.

2. Carter RG. Training for rural practice: what's needed? *Can Fam Physician* 1987; 33:1713.

3. Eden H. *Characteristics of good teaching. A publication of the National Centre for Faculty Development*. Miami: University of Miami School of Medicine, 1978.

4. Hoban JD, Carroll JG, Agna MA. A training programme for community physicians serving as preceptors in family medicine. *J Fam Prac* 1979; 8(5):1063–65.

5. Phillips TJ, Swanson AG. Teaching family medicine in rural clinical clerkships. *JAMA* 1974; 228(11):1408–10.

6. Pierson S, Glyn JK, Hoffmeister WR. Some considerations in the design of family practice residency experiences. *J Med Ed* 1977; 52:555–561.

7. Shellenberger S, Mahan JM. A factor analytic study of teaching in off campus general practice clerkships. *Med Ed* 1982; 16:151–5.

8. Schwarz RM. WAMI: an experiment in regional medical education. *West J Med* 1974; 121:333.

9. Stephens GG. On becoming a teacher of family practice. *J Fam Prac* 1977; 4(2) 325–335.

10. Warburton SW, Frenkel L, Snope FC. Teaching physicians to teach: a three year report. *J Fam Prac* 1979; 9(4)649–65.