This paper examines the status of postgraduate family medicine training in rural settings in Canada and identifies problems and how they are addressed. Specifically, a survey of 18 university programs examined the portion of family medicine block training that is done in a rural practice setting within the 2-year postgraduate family medicine training program. Family medicine block time during this 2-year program varied from the prescribed minimum of 8 months to a maximum of 12 months, some of which could be spent in a rural family practice. Survey results indicate that 9 of 18 programs offered family medicine training in a rural practice setting to some or all of their first-year family medicine residents, and that 99 of 684 first-year residents did some training in a rural practice setting. All programs offered some training in a rural practice setting to second-year residents, and 567 of 702 second-year residents did some practice in a rural setting. Additionally, in 12 of 18 programs, a rural family medicine block was compulsory. Respondents also indicated that isolation, accommodation, and supervision were common problems for rural family medicine residents, and that isolation and faculty development were common problems for rural physician-teachers. Contains a 16-item bibliography. (LP)
RURAL FAMILY MEDICINE TRAINING IN CANADA

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ABSTRACT

Objectives: To examine the status of postgraduate family medicine training in the rural family practice setting in Canada and to identify problems and how they are addressed.

Design: A questionnaire sent to all 18 Canadian Family Medicine Training Programs followed by a focus group discussion of results.

Results: Nine of 18 programs offer some family medicine training in a rural practice setting to some or all of their first year family medicine residents and 99/684 first year family medicine residents did some training in a rural practice setting. All programs offer some training in a rural practice setting to some or all of the second year residents and 567/702 second year residents did some training in a rural practice setting. In 12 of 18 programs a rural family medicine block is compulsory. The education models for training for rural family practice vary widely. Isolation, accommodation and supervision are common problems for rural family medicine residents. Isolation and faculty development are common problems for rural physician-teachers. A variety of approaches to these problems are used by the different programs.

Conclusion: The 18 Canadian family medicine training programs provide a variety of postgraduate training models for rural family practice that reflect different regional health care needs and resources. There is no common rural medicine curriculum. Networking through a rural physician-teachers group or a faculty of rural medicine could further the development of education for rural family medicine.

INTRODUCTION:

Vast rural areas that have shortages of physicians contribute directly to the difficulty of providing adequate, accessible rural health care in Canada. Over the last decade the departments of family medicine in Canada have responded to the need for training for rural family practice by incorporating a rural experience for
of the 16 medical schools are four years in length. The remaining
three, or more years of undergraduate university studies. Fourteen
in-depth rural family medicine training for some. This study
examines postgraduate family medicine training in the rural family
practice setting in Canada with a view to identifying strengths and
needs for improvement.

In Canada, students enter medical school after completing two,
three, or more years of undergraduate university studies. Fourteen
of the 16 medical schools are four years in length. The remaining
two are three years in length. Family medicine training is provided
at 18 family medicine training programs (Figure 1) as a two-year
postgraduate program accredited by and leading to certification
examination by the College of Family Physicians of Canada.

Family medicine block time during this two-year program varies
from the prescribed minimum of eight months to a maximum of
12 months, some of which can be in a rural family practice setting.
The remaining time is spent in hospital rotations and electives/selectives. An optional third year can be taken for
advanced skills training in GP anaesthesia, emergency medicine,
obstetrics, etc.

The choice of rural family practice as a career is dependent on
many variables including rural background, medical school
selection processes, rural learning experience during medical school and the quality and nature of postgraduate family medicine
training. Postgraduate education for rural family practice includes both appropriate in-hospital rotations and some
rural family medicine block time <7, 8>. Several Canadian
models have been described. Our present study specifically examines the portion of family medicine block training
that is done in a rural practice setting within the two-year
family medicine training program.

Rural family practice settings can vary from communities with no
towns to communities with a small active hospital. In the latter
setting, family physicians provide most of the in-hospital care
including emergency medical care, obstetrics and GP anaesthesia
in addition to their office family practice, nursing home and home
visits. Most Canadian studies of rural practice use the Statistics
Canada definition of rural which includes communities up to
10,000 population. Sometimes a geographic distance modifier is
added. The 1992 CMA report on underserviced regions used
distances of less than 60 km, 60-160 km and greater than 160 km
from an urban centre of 50,000 people or more. The 1993
Ontario Ministry of Health/Ontario Medical Association Agreement on Economic Arrangements provides for special CME and locum help for physicians practicing in communities of less than
10,000 people located further than 80 km from a major referral centre
who population exceeds 50,000. In our questionnaire, rural
practice and rural setting refer to "a community with less than
10,000 population".

STUDY OBJECTIVES:
1) To examine the present status of postgraduate family
medicine training in the rural family practice setting in
Canadian postgraduate family medicine training programs.
2) To identify problems and how they are addressed in order to
determine strengths of, difficulties with, and possible
improvements to postgraduate family medicine training in
the rural family practice setting.

METHOD:
A five page questionnaire was sent in July of 1993 to the
chairs/program directors of all 18 family medicine training
programs in Canada. All were completed and returned. The results
were presented to a Section of Teachers of Family Medicine
Workshop "Successful Resident Teaching in Rural Community
Practice" held in November 1993. This functioned as a focus group
adding a qualitative dimension to the survey and forms the basis
for the discussion in the paper.

RESULTS:
Models and Lengths of Rotation:
Total family medicine block time varied from 8 - 12 months. The
timing of the rural family medicine block is weighted heavily to
block to some or all first year family medicine residents. 99/684
first year family medicine residents did some training in a rural
practice setting. All of the programs offer a rural family medicine
block to some or all of second year residents. 567/702 second year
residents did some training in a rural practice setting. In 12/18
programs a rural family medicine block is compulsory. Ten
programs had short compulsory rural blocks - one for one month,
four for two months, and one for three months. Two programs had
long compulsory rural medicine blocks - one for four months and
one for six months. Optional rural family medicine blocks ranged
from 1-12 months.

Resident Acceptance:
Residents' ratings for rural family medicine blocks were reported as
equal or higher compared to other family medicine blocks.

Resident Problems with Rural Family Medicine Block
and How They Were Addressed:
The 18 chairs/program directors were asked to describe any
problems or difficulties that their residents have with their rural
family medicine training block and how these are addressed. The
problems are summarized in Table 1.

The major problem was isolation. The programs listed a variety of
different ways to address this problem. These included placing two
residents at each site, regular phone contact with other faculty,
establishing a resident "buddy" for monthly contact, a faculty
adviser, return to base for combined learning and social sessions,
computer and fax communications, on-site visits by rural co-
ordinator and weekly base teaching sessions with a monthly
support group for the "out of town" residents.

The next most commonly listed resident problems were
accommodation and resident supervision. Accommodation will be
discussed under the heading "program support" and supervision
will be discussed under the heading "faculty development".

Problems or Difficulties for Rural Physician-Teachers and
How They Were Addressed:
The 18 chairs/program directors were asked to describe any
problems or difficulties that their rural physician-teachers have and
how these are addressed. The problems are summarised in Table 2.

As with the resident problems, the major issue for rural physician-
teachers was isolation.

The problem of isolation was partly addressed through faculty
development which is discussed in more detail in the next section.
Four programs listed communication with site visits and/or
meetings by the rural program co-ordinator with the rural
physician-teachers as other ways to address isolation.

Faculty Development:
The programs were specifically asked how they provide/encourage
faculty development for their rural physician teachers. 17 of the 18
programs listed some funded faculty development programs. These
are summarized in Table 3. Despite the variety of types of faculty
development, in some cases the amount is summed up in one
respondent's comment: "but I fear we do not do nearly enough".

Program Support:
The chairs/program directors were then asked questions on
specific aspects of department/program support. These results are
listed in Table 4.

DISCUSSION:
Successful rural family medicine education is dependent on a
variety of factors including undergraduate ex- rien e , resident
interest and background, the overall postgraduate family medicine
training program, the rural family medicine block experience, the
rural faculty, and program support. This study examined the
portion of family medicine block training that is done in a rural
practice setting within the two-year family medicine training program.

The information in this study of rural family practice training in Canada was obtained from questionnaires sent to the chairs/program directors of the 18 family medicine training programs. All 18 were completed and returned, eliminating concerns about non-responder bias. The information supplied, however, is limited to that which was not obtained directly from rural family medicine residents and rural physician-teachers. The work would require a much larger study and resources beyond the scope of this project.

The Section of Teachers of Family Medicine Workshop "Successful Resident Teaching in Rural Community Practice" provided focus group qualitative validation of the questionnaire results and the basis for the discussion part of this paper. The discussion will be broadly divided into resident/learning issues and rural physician-teacher/teaching issues.

Resident/Learning Issues

A variety of factors contribute to the popularity and high ratings for rural family practice training. Generally, residents are welcomed into the communities and feel more personally involved. The rural family practice teaching setting provides a diversity of clinical learning with a mixture of office, house call, nursing home and hospital responsibilities including in-patient care, obstetrics and emergency work. In local hospitals they can have a more responsible role in patient care than in large tertiary centres where there are many other more senior residents. The typical one-on-one placement of a resident with a rural physician-teacher encourages Socratic mentorship and strong interpersonal relationships. Despite the popularity and high ratings for rural family practice training, our study results indicate a number of issues and problems that should be discussed and addressed.

Goals and Models:

The results show a wide variety of approaches to rural family medicine education among the 18 postgraduate family medicine training programs in Canada. There are no set objectives, curriculum or standard model for rural family medicine training in Canada. Experience range from a brief six-month exposure to the rural family practice setting to a twelve-month in-depth contextual rural family medicine education. Most Canadian family medicine residents have some exposure to a rural family practice setting, mainly through compulsory one or two months second year rural family medicine blocks. This short experience provides a sample of the joys and challenges of a rural family practice and may encourage some to choose this as a career. It is too short, however, for the resident to develop a high level of responsibility within the rural family practice setting and does not allow an in-depth rural medicine education. With the short model, most of the family medicine learning is done in the traditional family medicine curriculum. The short duration minimises the difficulties of isolation from families and peers.

The longer in-depth rural family medicine training models range from four months to 12 months of rural family medicine block time. Such a long rural placement is optional at most of the family medicine programs. At two it is compulsory. Because the rural placement forms a major part or all of the family medicine block for those residents, the education must go beyond a rural practice experience and cover the many general aspects and objectives of family medicine education. This can pose a considerable challenge in the need for group learning activity and family medicine course work in addition to case-based experiential learning. In most cases, long rural family medicine training blocks are provided at the second year level. This allows the residents to develop general family practice skills, and do course work and group learning activities within the traditional university-centred family medicine teaching unit during the first year.

With the long rural placement model, resident group learning activities are important for educational reasons, and are essential for peer social support and interaction which is usually difficult or lacking in the rural setting. If the rural block residents are located within a 1-1/2 hour commuting distance of the university, course work and group learning activities can be provided through a half or whole day weekly group activity and seminar series at the university. When distances are greater, regularly scheduled two day or longer resident conferences can be held either at the university or in various sites.

Isolation from Peers and Family

Isolation from peers and family is the most difficult problem for family medicine residents when in a rural practice setting, especially during long rural family medicine blocks. It may be particularly difficult for visible or invisible minorities and for residents with spouses or children who cannot move with them to the rural training setting. Having just completed a very social medical school experience, first year residents may have more difficulty adjusting to the rural practice setting than second year residents. The cost of transportation to ameliorate some of this isolation can be prohibitive for residents who are already deeply in debt from their previous educational costs. University/government support for return transportation can be crucial to the residents' acceptance of and benefit from rural based training. Adequate accommodation also needs to be provided. Other approaches include the development of a buddy system with other residents and the involvement of the rural practice co-ordinator and faculty advisers for the residents. Ready access to fax communication and computer communication bulletin boards can also be helpful.

The role of the community physician-teacher in helping the resident feel welcomed cannot be underestimated. The rural physician-teacher needs to be attentive to and supportive of the resident's various needs. This often involves helping the resident feel integrated, not only in the medical practice and professional community, but also in the community at large involving leisure and recreational activities. Residents, like other people, also have health care needs. While at times it might be convenient for the rural physician-teacher to provide medical care to the resident, this is inappropriate and can lead to a conflicting blurring of relationship boundaries. Alternative arrangements, however, must be facilitated.

Rural Physician-Teacher/Teaching Issues

Like rural family practice, teaching rural family medicine brings many joys and challenges. Teaching is an excellent, but sometimes humbling way to remain current in skills and knowledge, as the residents not only bring new ideas from their recent university training, but also often ask difficult questions. As the family medicine residents are often involved in patient care with physicians other than their supervisor, this can have a beneficial spillover effect for other physicians in the community. Rural physicians may become physician-teachers to add a mid-career interest and challenge to what has become for them, a comfortable routine. This does require some letting go and delegation of some direct patient care to the resident. For some this can be quite difficult. Many rural physician-teachers find having one resident at a time still allows them to see a significant portion of their patient visits while the resident sees some. This level of shared care tends to be reasonably accepted by the rural physician's patients as well, although patient fatigue for seeing residents can be a problem, particularly in practices where there is a high turnover of residents such as in the short one or two month rural experience model.

Faculty development is a major concern for rural physician teachers and their departments of family medicine. Some physicians find teaching easier than others, but for all it is a skill that can be developed. Teaching involves a body of knowledge and teaching skills that can be learned. This is particularly important for the physician-teachers who have residents with them for a long, in-depth rotation where they will be responsible for providing not only a rural experience but also teaching the fundamental family medicine knowledge and skills. The rural physician-teacher needs to keep up to date in knowledge and skills not only in general family medicine but also in the fields of obstetrics, emergency medicine and sometimes anaesthesia which they practice. This can be a daunting task.

Fitting in necessary teaching and clinical commitments makes juggling of schedules more complicated. "Outsiders and emergency
Funding issues are an important concern. Several premises can be made. The rural physician teacher's total income and time commitment should be about the same as if not teaching. Some of the time that would be spent providing purely clinical work should now be spent doing teaching activities. This includes time for one-on-one clinical supervision or direct viewing or videotape review, patient chart reviews, joint rounds, tutorials and other scheduled and formal discussion time. The rural physician-teacher also needs time for faculty development and the necessary administrative and meeting commitments and hopefully some time for rural practice research to advance the discipline.

To be sustainable, funding needs to be provided for teaching and associated activities. Some of this comes from the residents' clinical earnings which generate teaching time; however, the physician-teacher will be involved in supervising these patient encounters as well. Usually further departmental funding is required to make up the shortfall and also to cover the additional office expenses that are required when having a resident. These include additional staff time used in explaining teaching to patients and the need for increased office space. The Universities should provide videotaping equipment or the installation of one-way mirrors for direct viewing of residents with patients. In situations where the universities pay either little or no stipend, the rural physician-teacher may need to be less committed to teaching and residents are more likely to feel used as a locum within a less than optimum learning/teaching environment.

Isolation is also a problem for rural physician-teachers. While the rural physician-teachers have their own community support for clinical work and social activity, teaching is often a new interest and experience that may not be shared by other physicians in that community. It is very helpful if in each rural teaching community there are at least two physicians who share the teaching responsibility and commitment. This helps encourage shared development of this endeavour and provides a helpful sounding board during tough times. (It also gives residents more than one role model and a balancing view if the resident has conflicts with one physician-teacher.) Communication by teleconference, fax and computer networking with other rural physician-teachers and the rural program co-ordinator is essential but no substitute for personal contact and site visits.

An ill, troubled or troubling resident poses a particular challenge in a long rural family medicine block situation. The rural physician is less able to go down the hall and readily talk to another experienced physician-teacher about the issue and may be tempted to become inappropriately over-involved as there are often limited local resources. Under these circumstances, the role of the rural co-ordinator is invaluable. Often site visits and discussions can help resolve the issues and underlying conflicts and both the resident and rural physician-teacher may carry on in an improved relationship. Depending on the troubling issues or illness, however, alternative arrangements such as placing the resident in another setting may be required.

CONCLUSION:

There is a shortage of family physicians in many of the vast rural areas in Canada. Education is a key factor in the recruitment and retention of rural physicians. Exposure to the joys ad challenges of rural practice encourages family medicine residents to consider rural practice as a viable career choice.

Providing some family medicine training within the context of the rural family practice setting is an important part of education for rural family practice. The Canadian family medicine training programs have responded to this challenge by providing a variety of models that integrate training in the rural practice setting into the two year postgraduate family medicine program. These vary from one-month compulsory rural family medicine blocks to fully integrated rural family medicine training programs where all of the family medicine block time is contextual in the rural setting. This variety of models has developed in response to different regional health care needs and resources and provides residents applying for family medicine training positions the flexibility in choosing training models to best suit their learning needs and personal situation. This approach however lacks the cohesion of a common rural medicine curriculum.

Common problems with family medicine education in the rural setting include isolation, accommodation, and supervision for rural residents, and isolation and faculty development for rural physician-teachers. These are difficult to address but many positive strategies have been developed in the 18 family medicine training programs. Networking through a physician-teachers' group or a faculty of rural medicine could facilitate the development of rural practice education through the discussion of problems and sharing of approaches and solutions.

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SUBMITTED FOR PUBLICATION TO CANADIAN FAMILY PHYSICIAN

FIGURE 1 Canadian Postgraduate Family Medicine Training Programs

| University of British Columbia | University of Alberta |
| University of Calgary | University of Saskatchewan |
| University of Manitoba | University of Western Ontario |
| McMaster University | Lakehead University/McMaster University* (Northwestern Ontario Family Medicine Program) |
| University of Toronto | Queen's University |
| University of Ottawa | Laurentian University/University of Ottawa* (Northeastern Ontario Family Medicine Program) |
| University of Sherbrooke | Université de Sherbrooke |
| Université de Montréal | McGill University |
| Université Laval | Dalhousie University |
| Dalhousie University | Memorial University |
| * denotes affiliate university medical school |

Table 1: Resident problems or difficulties (number of programs reporting)

| Isolation (11) | Accommodation (5) | Resident supervision (6) | Travel (1) | Lack of intensive skill training (1) | Speciality education (1) | No hospital affiliation (1) |

Table 2: Rural physician-teacher problems or difficulties (number of programs reporting)

| Isolation (from University) (7) | Faculty development (5) | Inadequate compensation (1) | Integration of residents into community hospitals (1) | Patient acceptance and patient "fatigue" (1) | Time for supervision evaluation (1) | Dealing with "troublesome" residents (1) | Lack of feedback from program (1) | Developing sufficient academic activity (1) | Recruitment and retention of physician-teachers (1) |
Table 3: Faculty Development (Number of programs reporting)
Annual or semi-annual retreat or workshop (11)
Funding for attending Section of Teachers of Family Medicine Conference (6)
Site visits (1)
Monthly teleconferences (1)
Masters level courses (1)
"Grateful Med" software and training (1)
University based department faculty development (1)

Table 4: Department/Program Support
(Number of programs answering yes to specific questions on program support)
Physician responsible for the rural-based component of residency program (16)
Specific secretarial support for the physician in this role (16)
Resident accommodation paid primarily by university or government (14)
Resident responsible for some or all of resident accommodation costs (5)
Rural physician-teacher responsible for some or all of resident accommodation costs (4)
Resident travel costs to and from university paid by university or government (17)
Videotape equipment paid for by university or government (11)
Physician-teacher travel costs to and from university paid by university or government (17)
Stipend* paid by university to physician-teacher in addition to the fee for service billing of the resident (13)
* The stipend varied from "peanuts" to more than $1,000 per month

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