

RURAL MEDICAL EDUCATION

RPAP CO-ORDINATING COMMITTEE
WORKING GROUP ON RURAL MEDICAL
EDUCATION



Approved by the RPAP Co-ordinating
Committee - 28 September 1999

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INTRODUCTION AND BACKGROUND

On 25 March 1999, the RPAP and the Alberta Medical Association (AMA) jointly hosted a retreat to discuss opportunities for rural medical education in anticipation of the approval of the College of Family Physicians of Canada (CFPC) Working Group report on Postgraduate Education for Rural Family Practice. The main recommendations of the CFPC WG Report are attached as Appendix A to this report.

A consensus was developed to more fully explore a core postgraduate curriculum for rural family practice (core rural family practice curriculum) and a rural medical stream, to consider improvements to special or additional skills training, and for the RPAP Co-ordinating Committee (RPAP CC) to take a leadership role.

The RPAP CC agreed to provide that leadership, and established two working groups on rural medical education and additional skills to explore the issues and implications and to develop recommendations. The Rural Medical Education Working Group's terms of reference are attached as Appendix B to this report.

The RPAP CC acknowledges that through the RPAP the two Faculties of Medicine at the Universities of Alberta and Calgary accomplish a great deal regarding rural initiatives. However, the national recommendations from the Family Medicine accreditation body, the CFPC, provide an opportunity to strengthen rural medical education and practice in Alberta.

Alberta's Rural Physician Action Plan (RPAP) is a comprehensive action plan for the recruitment and retention of rural physicians.

The recruitment and retention of physicians is a "complex interplay" of many variables, not all of which the RPAP can influence. These variables can be grouped into two major categories: *professional* issues and *lifestyle* issues.

Professional issues include the confidence and competence of new graduates to practice in rural Alberta, the degree of professional isolation experienced by rural physicians, and the financial support (funding models that provide security and flexibility for the physician and recognize the physician as a community resource) provided to them. *Lifestyle* issues include the personal isolation encountered by the physician and family.

With the **Vision** of "having the right number of physicians in the right places, offering the right services in Rural Alberta", the RPAP CC sees a core postgraduate rural curriculum as crucial to accomplishing this Vision, with a rural stream as advocated by the CFPC Working Group an important method of delivering that core rural family practice curriculum, and one that will buttress rural physician recruitment and retention.

Quoting from the CFPC Working Group report:

“In Canada, rural education initiatives at the postgraduate level have developed almost totally within provincial regions. The forces for education reform at this level have come from grassroots rural physicians’ input, pressure from rural practice groups within some provincial medical associations, educational leadership at some university medical school departments of Family Medicine, with some support from general medical organizations and governments. As a result, a variety of Family Medicine training programs have been developed in response to regional needs and resources available.”

“There has been, however, no common curriculum for postgraduate education for rural family practice or for rural Family Medicine advanced skills. This has made it difficult for residents to identify and select appropriate, portable yet specific postgraduate education for anticipated rural family practice. Availability and structure of postgraduate and special/advanced skills education for rural family practice is an area of particular concern for both practicing and prospective rural doctors.”

“Successful development of core postgraduate education for rural family practice and special advanced skills training is required to meet the health care needs of rural Canadians. Producing more physicians with the knowledge, skills and attitude for rural family practice will require involvement, collaboration, co-operation, and support of governments, medical schools, medical organizations and rural doctors.”

In June 1999, the RPAP CC Working Group on Rural Medical Education (RME WG) began work on the development, funding, and implementation of a core postgraduate curriculum and rural medical stream for rural family practice in Alberta.

The Board of the College of Family Physicians of Canada approved the recommendations contained in the report of the Working Group on Postgraduate Education for Rural Family Practice on 12 May 1999.

The RPAP CC approved the recommendations developed by the RPAP CC Working Group on 28 September 1999.

This report outlines the major relevant issues pertaining to the introduction of a core postgraduate curriculum for rural family practice in Alberta, delivered through a rural medical stream. In accordance with the RME WG’s terms of reference, specific recommendations are made to the RPAP CC for their considered recommendation to the Minister of Health & Wellness.

The report also discusses:

- the number of postgraduate (PGY) positions and the source of funding for these positions
- the impact on the undergraduate medical system and the current two-year postgraduate Family Medicine program
- the governance of a rural medical stream for rural family practice in Alberta
- the number and locations of streams, and
- infrastructure costs associated with its introduction.

**CONSIDERATIONS FACING THE INTRODUCTION OF A CORE POSTGRADUATE
CURRICULUM FOR RURAL FAMILY PRACTICE IN ALBERTA**

WHY A RURAL CORE CURRICULUM?

The College of Family Physicians of Canada (CFPC) Working Group report on Postgraduate Education for Rural Family Practice (CFPC WG Report) advances that a core postgraduate curriculum for rural family practice is essential in order to develop the knowledge, skills & attitudes needed for rural family practice. The CFPC WG Report describes in great detail why this is so, and the reader is referred to the full CFPC WG Report.

The CFPC WG Report recommends (Recommendation #6 at page 25) that: competency in the knowledge, skills and attitudes for rural family practice should be the goal for rural Family Medicine residency training, and educational content should be based on the clinical realities of rural practitioners building on the template of problems and procedures (appendix 2 of the CFPC WG Report).

The CFPC WG Report also states that:

- these curricula should be a collaborative effort between the departments of Family Medicine and the teaching specialties,
- clear learning objectives based on the knowledge, skills and attitudes for rural family practice should be developed by rural Family Medicine training programs for their overall two-year program, and
- rural Family Medicine residents should have the opportunity to develop their own specific additional learning objectives consistent with the principles of adult learning.

The CFPC WG Report explains that medical education is a continuum with undergraduate education providing a foundation for postgraduate programs. It goes on to recommend (Recommendation #1 at page 21) that: all undergraduate programs should include core rural Family Medicine rotations, and that opportunities for interested medical students to pursue ongoing and extensive undergraduate education in rural, remote, and secondary medical settings for core specialty medicine or elective rotations need to be developed.

For Family Medicine residents who choose not to pursue the core postgraduate curriculum for rural family practice, the CFPC WG Report (Recommendation #2 at page 22) states that: “core postgraduate rural/regional community based rotations are desirable within all programs along with sufficient rural elective opportunities for all residents.” The CFPC WG Report adds that “in Family Medicine these community rotations should be no less than eight weeks in duration and occur in rural or regional centres, and all residents should have access to significant rural electives/selectives in Family Medicine and other disciplines.”

The premise is that by providing these rotations in rural or regional centres, you provide the medical resident with a more diverse educational experience and broader potential practice considerations.

The recommendations regarding a core postgraduate curriculum for rural family practice, and “early and ongoing rural experiences” in the undergraduate and postgraduate curricula are also supported by the 1995 World Organization of Family Doctors (WONCA) Policy on Training for Rural Practice:

“After a rural background the next strongest factor associated with entering rural practice is undergraduate and postgraduate clinical experience in a rural setting”

“Rural family physicians generally provide a wider range of services than do their metropolitan counterparts. Consequently, there is a need for specific residency training programs for rural practice, which prepare new medical graduates for a career in the country. Wherever possible, training for rural practice should occur in the rural setting based at regional rural hospitals and rural family practices. In addition to standard training for family practice, rural practice vocational training requires specific emphasis on: hands-on learning of procedural skills; the spectrum of illnesses in rural and remote communities; the sociology and psychology of rural and remote communities; and professional and personal aspects of living and working in small rural communities.”

WONCA Policy on Training for Rural Practice, 1995

Fortunately, the current RPAP-funded undergraduate and postgraduate rural rotation programs at the two Faculties of Medicine go a great distance to address the CFPC WG Report recommendations as they apply to the undergraduate medical curriculum and to the non-rural core postgraduate curriculum.

At **The University of Calgary**, the Clerkship year of the undergraduate medicine curriculum provides a four-week rotation in Family Medicine, which must be spent in a rural community, unless there are extenuating circumstances. This rural clerkship has been one of the most successful and popular rotations of the undergraduate curriculum and the rotation has consistently received excellent reviews from the clerks on the quality of the experience at these sites. In the second year of the Family Medicine residency program, there is a mandatory requirement to spend 8 weeks in rural communities. There is also the opportunity to spend a further 8 weeks of elective in rural communities.

At the **University of Alberta**, undergraduate medical students must do a four-week Family Medicine rotation in rural Alberta. There are 24 rural communities available. The student is able to work on a one-to-one basis with the family physicians in their practice, get direct experience in the hospital and interact with other community resources. In addition to the mandatory rotation, undergraduate medical students may also do elective time in rural or urban Family Medicine. Currently, in the second year of the Family Medicine residency program, residents are encouraged to do a Family Medicine rotation of up to 20 weeks at an approved rural site. They may do additional elective time in rural Family Medicine as well.

The method **recommended** by the CFPC WG Report to deliver the core postgraduate curriculum for rural family practice is a **rural Family Medicine stream**:

“Rural Family Medicine training streams should be developed as appropriate postgraduate training for rural family practice”

CFPC WG Report - Recommendation #3 at page 22

The CFPC WG Report adds that, “ these rural streams should be recognizable to medical students upon CaRMS application (or alternate match in Quebec) and identify trainees upon entrance”, and that “postgraduate education specific to rural practice should continue to be offered within the present two-year time frame.”

Furthermore, at page 23 (Recommendation #4), the CFPC WG Report states that: “rural Family Medicine training streams should be community-based integrated programs with full academic support; that the four principles of Family Medicine provide the framework for the development of specific curricula; that a minimum of six months of postgraduate education should occur in rural settings.”

The CFPC WG Report at pages 23-25 (Recommendations #4 and #5) and pages 26-29 (Recommendations #7-9) provides an extensive description of the generic attributes of a rural stream, ones that the RME WG fully supports.

The CFPC WG Report notes that:

- including rural rotations in both years of a [Family Medicine] residency is important
- rural Family Medicine postgraduate education should be based in settings where there is an active hospital
- residents should have first hand experiences in the provision of clinical services within communities without hospitals
- the teaching of continuity of care is important and requires specific educational planning in order to incorporate this concept into rural postgraduate education and within each specific rural site.
- a minimum of four months should occur in at least one rural site and the incorporation of horizontal experiences to meet curriculum goals and resident specific learning objectives should be encouraged and explored.

The RME WG feels that the stream’s clinical rotations in Family Medicine and specialty disciplines should occur, **to the greatest extent**, in rural and regional practice and hospital settings.

The pivotal and meaningful involvement of rural-based clinical faculty supported by full-time faculty is emphasized in the CFPC WG Report, and in particular on pages 28-29, Recommendation #8).

The RME WG also strongly supports the recommendations that “there must be a high degree of local [rural] input and control in the university/rural network providing the rural programming”, and that “rural training programs require an identified coordinator with a clear mandate to collaboratively support rural faculty in their training roles and responsibilities.”

Specific recommendations on the Governance and Organization of the rural medical stream follow later in this report.

How will a rural stream make a positive difference for rural physician recruitment and retention?

The attached synopsis of the literature prepared (Appendix C) produces the following observations:

1. Such programs greatly enhance rural recruiting, with programs quoting 34-51% of graduates locating their practices in rural and under-serviced areas, often in the region of the training program.
2. Such programs are significant factors in enhancing the retention of rural physicians, with some studies quoting two decades of experience.
3. Such programs tend to have higher satisfaction ratings in resident and undergraduate evaluations, and graduates feel better prepared for the vagaries of rural practice.
4. Exposure to rural context and physician role models, along with integration into the rural community, are key factors in the decision making process of practice location.

One Rural Stream or Two?

The RME WG believes that when a core rural family practice curriculum is implemented in Alberta, a **single** Alberta rural Family Medicine "Network" offered through two "nodes" - the University of Alberta and The University of Calgary - is preferable.

Such a **Network** would take advantage of the resources and expertise of both Faculties of Medicine, and such a jointly supported and co-ordinated program would further strengthen the collaboration between the two universities.

This model is based on the experience of the Northwestern Ontario Medical Program (NOMP) in which both McMaster and Lakehead Universities and the five Ontario university Family Medicine departments are involved. It also recognizes the need for direct access to the universities for CFPC accreditation, and such items as student appeals, effective management of the stream, and for trainees having identification with a university during and upon training. The Governance and Organization of the rural medical stream is discussed later in this report.

IMPACT ON CURRENT UNDERGRADUATE MEDICAL PROGRAM

Evaluative feedback from the undergraduate medical students at both Universities in this province clearly ranks the rural Family Medicine rotation at the top in terms of popularity and learning value for the students. The only complaint is that the rotation is not long enough and there is interest in extending this rural rotation, thereby exposing the students to many of the aspects of rural medicine beyond Family Medicine.

There are educational advantages in teaming undergraduate medical students with residents at the same location - this leads to some interesting three-way teaching between preceptor, student and resident. This dual level of attachment should be encouraged where possible.

The RME WG also looked to the experience of the Northwestern Ontario Medical Program (NOMP) that supports the close integration of undergraduate and postgraduate medical programs.

Given the recommendations of the CFPC WG regarding the undergraduate medical program (Recommendation #1 at pages 21-22), the RME WG strongly recommends that the current RPAP-funded undergraduate rural experiences not be diminished with the introduction of a core postgraduate curriculum for rural family practice delivered through a rural stream.

An increment in rural postgraduate positions would need a sufficient number of undergraduate positions. The exact number of such incremental undergraduate positions will need to be decided during curriculum development (discussed below). There is also the need to consider augmented support for the clinical faculty, e.g. faculty development, in addition to remuneration to promote undergraduate teaching. Further, any changes to implement a rural stream for the new core postgraduate curriculum for rural family practice needs to consider the ability of rural teaching sites to accommodate both undergraduate and postgraduate trainees.

NUMBER OF RESIDENCY POSITIONS

At the 1999 annual meeting of the Canadian Medical Association (CMA) a formal motion was passed regarding an impending physician resource shortage. There was a clear expectation by the CMA that Canada should, on a net basis, be self sufficient in the production of its own physician needs.

Clearly, if there is a potential overall physician resource shortage that shortage will be magnified and more acutely felt in the rural areas unless specific processes are set in place now.

The CFPC WG Report (Recommendation #3 at page 22) states that:

“the number of rural Family Medicine training stream positions should reflect rural health care needs of communities for rural doctors. For most parts of the country, this will require a significant increase in the rural stream Family Medicine residency positions. Experience has shown that some residents completing rural Family Medicine training streams will choose to practice in mid-sized communities, which need family physicians along with a few locating in large cities due to family or social circumstances. After a period of practice, some rural physicians relocate to a city. The reverse of urban doctor relocations to rural practice is rare. As a result of these factors, the [percent] of rural stream residency positions [to the total of Family Medicine residency positions] needs to be larger than the percent of rural family physicians [to total practicing family physicians].”

The RME WG members agree that it is important that the rural stream delivering the core rural family practice curriculum meet the needs of Alberta for rural family physicians. There are 400-600 rural physicians in Alberta, and the current Family Medicine programs have 42 (UofA) and 30 (UofC) trainees per year.

The RME WG strongly supports a rural stream with 30-35 new positions per year allocated amongst the two Faculties of Medicine, and implemented over a three-year period. It bases this enrollment on the following factors:

- a minimum 10% physician turnover rate experienced nationally recognizing that some authorities believe the actual turnover may be as high as 20%
- a goal of self-sufficiency to meet rural physician needs from Alberta trainees

- the risk of continuing to rely on the recruitment of International Medical Graduates (IMGs) to augment the recruitment of Canadian trained physicians for rural practice. Once full licensure has been achieved, IMGs are able to migrate to urban practice
- a desire for effective management of the rural stream in terms of class size and cost
- the trend for female medical students, who comprise over half the medical school enrollment in Alberta and nearly 65% nationally, to prefer urban practice settings after residency
- the deficit starting position that is faced in terms of the overall number of family physician positions in Canada
- the number of regional and rural training sites and rural faculty that might be available
- consideration of the number of Family Medicine trainees who currently join rural practice.

The RME WG notes that the Alberta Health & Wellness-AMA Physician Resource Planning Committee (PRPC) will soon be in the position to clarify ongoing needs.

Ability to Re-allocate Existing Positions

The reallocation of existing Family Medicine residency positions to this rural stream was viewed by the RME WG as not viable given the ongoing and currently urgent urban needs for family physicians, especially in Calgary and Edmonton.

RESEARCH

This promising and exciting new educational paradigm opens many avenues to explore innovative ways of delivering medical education and practice. It will be important to foster research activities within the rural medical communities around Alberta. That there is interest in this area is evidenced by a recent observation. When the Federal government made \$3 million available for rural research last year, they received three times what they expected in the number of applications. A large proportion of these came from rural medical communities.

The RME WG discussed the need for hard funding support for research related to academic rural issues involving teaching and new knowledge, and research development. A budget amount has been included in the proposed budget (included in the section, **RESOURCES**).

EVALUATION

Whenever there is exploration of a new method, whether it is therapy, investigation or education, it is essential to evaluate its effectiveness. This evaluation should occur at two levels.

Firstly, it will be important to include resources for internal evaluation and feedback. This should be done on a site and preceptor basis, with close linking to measurement of performance and achievement of learning objectives. Relatively immediate feedback is clearly more effective at fine tuning and enhancing the delivery of effective education. Evaluation is one of the most difficult tasks encountered by community faculty, especially in the early years of their teaching careers. This will be an area that requires a significant amount of faculty development. Ongoing key performance indicators (KPI) as set out in the RPAP Business Plan will also be utilized.

Secondly, there is an obligation to formally evaluate the standard of education produced by the rural stream. The primary mechanism for this will be program accreditation by the College of Family Physicians of Canada, which occurs on a regular and proscribed basis. It is also advisable to externally evaluate the business case of the rural stream after implementation to ascertain that the provincial government is getting good value for money in this venture.

The RME WG also discussed the need for funding support for the evaluation of this rural stream. The proposed budget (included in the section, **RESOURCES**) includes a proposed amount.

GOVERNANCE AND ORGANIZATION

There are numerous possibilities for the governance of a rural stream delivering the core postgraduate curriculum for rural family practice. However, while any option needs strong linkages with the Faculties, from the perspective of rural physicians, there also needs to be, as the CFPC WG Report recognizes, a degree of decentralization and strong linkages with rural medicine and rural communities.

The RME WG recommends the establishment of a single Alberta Rural Family Medicine “Network” (ARFMN), offered through two “nodes” - the University of Alberta and The University of Calgary – having a single governance committee, the RPAP CC through a new Family Medicine Network Education Committee.

Each node would be led by a Unit Director, academically accountable to the applicable department of Family Medicine (through the residency program director), but accountable to the governance committee for financial matters and for Network policy and strategy.

The RPAP Program Manager would act as the Network’s administrative officer, assisted by a small secretariat.

The RPAP CC would set and allocate the Network budget, and contract services and directly fund the universities and other parties, receiving the recommendations of the Family Medicine Network Education Committee. The RME WG recommends that the RPAP CC work with Alberta Health & Wellness to review the RPAP CC’s legal status such that the setting and allocation of the Network budget, and the funding and contracting for services through the RPAP CC may occur.

Family Medicine Network Education Committee

The general role of the Family Medicine Network Education Committee would be to recommend policy on issues related to the Network, including (but not limited to):

- maintaining satisfactory relationships with the University of Alberta and The University of Calgary, Alberta Health & Wellness, the Regional Health Authorities and other organizations whose support and encouragement are essential
- the establishment of goals, objectives, strategies and performance criteria for the Network
- the introduction of new initiatives
- recommendations concerning the allocation of the budget and contracting for services

The Family Medicine Network Education Committee would consist of a small number of stakeholder representatives, some appointed and voting and some *ex officio* non voting, including:

Voting

- Deans of Medicine (or their designate) (2)
- RPAP CC Chair
- Rural RHA representative (1)
- Rural faculty (1) who is also a member of the AMA Section of Rural Medicine
- Rural faculty (1) who is also a member of the CFPC (Alberta Chapter)
- Rural faculty (1) who is also a member of the SRPC

Ex Officio Non Voting

- Unit Directors (2)
- Chief Residents (2)
- RPAP Program Manager

The Family Medicine Network Education Committee would have an elected physician chair selected from amongst the Voting members. The Committee chair would:

- convene and conduct regular meetings of the Committee
- maintain ongoing communication and liaison with Network medical students and residents and Network faculty
- oversee the quality of their participation, identify and resolve problems, and
- make recommendations to the Family Medicine Network Education Committee concerning the appointment of the Unit Directors.

The chair would also be expected to meet regularly with the Unit Directors for such purposes as coordinating expectations and demands upon Network resources, and reviewing evaluations of both the Nodes and the specific educational experiences provided to the Network's medical students and residents.

Unit Director

The Unit Directors will have had recent and extensive rural practice experience, and are:

- academically accountable to the applicable Family Medicine residency program director for the undergraduate, postgraduate and continuing medical education activities of the Node, and
- to the RPAP CC through the Family Medicine Network Education Committee for financial matters and for Network policy and strategy.

The Unit Directors would also be responsible for:

- providing direction for all aspects of the Node including the selection (working with the Residency Program Directors in selecting residents within the CaRMS process of each University), monitoring and evaluation of its students, the maintenance and evaluation of relevant educational objectives for the Node
- ensuring that the clinical educational experiences are of high quality and founded upon standards of clinical practice that continue to be attractive to students and residents and the Province's Faculties of Medicine
- coordinating and collaborative efforts for the benefit of the Network
- the recruitment of new practice groups and rural faculty and sustaining the commitment and support of participating physicians

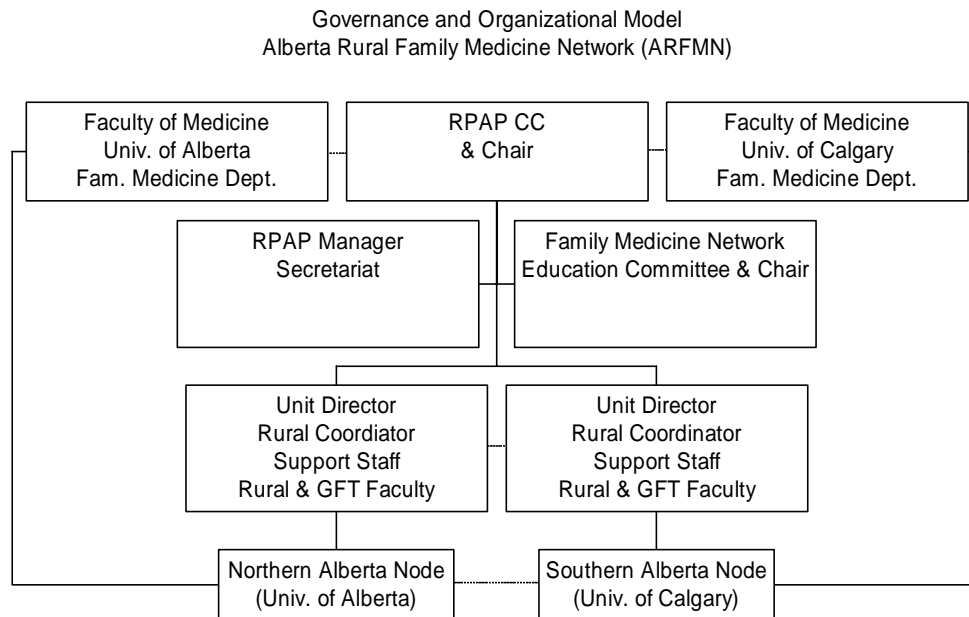
- the establishment of an advisory group of Network faculty and staff, medical students and residents for the purposes of planning, coordinating and overseeing respective components of the Node's operation
- maintaining regular communication with the rural faculty, visiting each teaching site on a regular basis
- overseeing the evaluation and development of the clinical and teaching skills of the rural faculty, and to provide recommendations for their academic appointments
- ensuring the Network meets University and CFPC standards and requirements for accreditation
- attending and participating in the applicable Faculty and/or Department of Family Medicine residency program committee
- ensuring the Network selects and prepares trainees for rural practice

The Unit Directors would be appointed by the RPAP CC and the applicable Faculty based upon an appropriately representative search process conducted in collaboration with the Network's stakeholders.

The Unit Directors would need to be at least 0.5 FTE and hold or be eligible to hold a GFT appointment. They will need to be supported by a small support staff including a rural coordinator and 1-2 secretarial staff and, 1-1.5 GFT Faculty.

Initially, the node's support services could be purchased for the Faculties, and additional faculty time would be purchased, for example, for specialty training. Rural site coordinators may also need to be appointed and provided with a nominal honorarium.

The diagram below illustrates the governance and organization model of the Alberta rural Family Medicine Network (ARFMN):



CURRICULUM DESIGN

The RME WG feels that curriculum development – the clinical curriculum and academic enhancements - is an area for the two Unit Directors to pursue within the guidelines of the CFPC, the recommendations of their Working Group report, and the recommendations of this report. The development of the core rural family practice curriculum will need to involve the rural and GFT faculty, including the specialty coordinators, in an iterative process before being formally submitted to the applicable Family Medicine department for consideration. This development work should begin with the appointment of the Unit Directors.

The Unit Directors need to consider the following items, which is not an exhaustive list but rather an illustration of many of the necessary considerations:

- Core undergraduate rural educational experiences should remain a necessity for all undergraduate medical students.
- Core postgraduate rural/regional community based rotations are desirable within all {postgraduate} programs along with sufficient rural elective opportunities for all residents. In Family Medicine these community rotations should be no less than eight weeks in duration and occur in rural or regional centres.
- All {Family Medicine} residents should have access to significant rural electives/selectives in Family Medicine and other disciplines.
- The rural {Family Medicine} stream should be recognizable to medical students upon CaRMS application and identify trainees upon entrance.
- Postgraduate education specific to rural practice should continue to be offered within the present two-year {non-rural stream Family Medicine program} time frame.
- The rural Family Medicine training stream should be a community-based, integrated program with full academic support.
- The four principles of Family Medicine provide the framework for the development of specific curricula.
- A minimum of six months of {Family Medicine} postgraduate education should occur in rural settings and including rural rotations in both years of a residency are important. Training should default to regional and rural locations unless there are compelling reasons that the training for a particular subject take place elsewhere.
- Rural Family Medicine postgraduate education should be based in settings where there is an active hospital.
- {Family Medicine} residents should have first hand experiences in the provision of clinical services in communities without hospitals.
- The teaching of continuity of care is important and requires specific educational planning in order to incorporate this concept into rural postgraduate education and within each specific rural site. A minimum of four months should occur in at most one rural site.
- The incorporation of horizontal experiences to meet curriculum goals and resident specific learning objectives should be encouraged and explored.
- The learner-teacher dyad should be based on the preceptorship model for both Family Medicine and specialty-based educational experiences/rotations.
- The guidance of a rural practitioner allows trainees to develop a confidence and belief in their own abilities necessary for safe rural practice.
- Faculty involved in the teaching of rural Family Medicine residents must support the goals of the rural Family Medicine program.
- Rural faculty must be supported and integrally involved in program development and evaluation.

- The knowledge, skills, and attitudes required for effective team functioning are developed.
- Competency in the knowledge, skills and attitudes for rural Family Medicine should be the goal for rural Family Medicine residency training.
- Curricula and educational content should be based on the clinical realities of rural practitioners building on the template of problems and procedures (See appendix 2 of the CFPC WG Report).
- These curricula should be a collaborative effort between the departments of Family Medicine and the teaching specialties.
- Clear learning objectives based on the knowledge, skills and attitudes for rural family practice should be developed by rural Family Medicine training programs for their overall two-year program and are essential for each rotation within the program.
- Rural Family Medicine residents should have the opportunity to develop their own specific additional learning objectives consistent with the principles of adult learning.
- Formative (in-training) and summative (completion) evaluations should be based on the learning objectives identified by the program, the rotations and individual residents.
- Hospital experiences or rotations should be appropriate for the residents' learning needs for future rural practice.
- Patient presentations should closely resemble those encountered in and referred from rural practice.
- Clinical workload and educational activities appropriate for the development of the knowledge; skills and attitudes for future rural practice are necessary.
- The teaching obligation to rural Family Medicine residents is of equal importance to other teaching responsibilities (e.g. specialty residents).
- Family physicians have a significant role in-patient care and share a collegial role with specialists within the hospital teaching environment.
- Specialty-based hospital rotations should be developed as far as possible at regional hospitals.
- Intensive high volume rotations in urban or tertiary hospitals may be required to attain knowledge, skills, and attitudes in areas such as obstetrics, management of trauma, critical care, or psychiatric emergencies.
- Urban or tertiary training must be combined with extensive experience in a rural setting to develop an approach and confidence to manage these clinical problems outside the urban setting.
- University specialty departments have a social responsibility to rural communities to provide appropriate training and referral backup to rural practitioners and their accreditation should include an assessment of their commitment to educating physicians for rural practice.
- Universities should support and develop rural physician teachers as integral faculty members.
- Funding and infrastructure support for rural physicians involved in teaching activities are essential.
- Physicians involved in supervising and teaching rural training stream residents should receive university faculty appointments and appropriate funding.
- Specialty preceptors should have appropriate faculty appointments ideally in both Family Medicine and their specialty departments.
- Rural faculty should have ready access to library, Internet, and other long distance telecommunication technologies.
- There must be a high degree of local input and control in the university/rural network providing the rural programming.

- Faculty development activities specific to rural faculty are required.
- Rural training programs require an identified co-ordinator with a clear mandate to collaboratively support rural faculty in their training roles and responsibilities.
- University faculty and programs should nurture and develop present and future rural Family Medicine residents.
- Measures must be instituted/facilitated to allow those interested in working in rural practice to meet, mingle and empathize. Barriers such as transportation and additional accommodation costs should be minimized and resident support structures should be developed.

RECOMMENDATIONS

This report has nine recommendations regarding the implementation of a new core rural family practice curriculum for Family Medicine within the two-year Family Medicine program using a rural stream as the delivery method. The Rural Medical Education Working Group's recommendations are as follows:

1. The core postgraduate curriculum for rural family practice as outlined in the College of Family Physicians of Canada (CFPC) Working Group report on Postgraduate Education for Rural Family Practice should be introduced in Alberta beginning 1 July 2000 with the first intake of students on 1 July 2001.
2. The core rural family practice curriculum should be delivered through the establishment of a single Alberta Rural Family Medicine "Network" (ARFMN), offered through two "nodes" - the University of Alberta and The University of Calgary - having a single governance committee, the RPAP CC through a new Family Medicine Network Education Committee. The Network should integrate all rural undergraduate medical, postgraduate medical and continuing medical education activities of the universities.

Each node would be led by a Unit Director, academically accountable to the applicable department of Family Medicine (through the residency program director), and accountable to the governance committee for financial matters and for Network policy and strategy.

The RPAP Program Manager would act as the Network's administrative officer, assisted by a small secretariat.

The RPAP CC would set and allocate the Network budget, and contract services and direct fund with the universities and other parties, receiving the recommendation of the Family Medicine Network Education Committee. This will necessitate changes to the RPAP CC's legal status.

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- the introduction of new initiatives
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- convene and conduct regular meetings of the Committee
- maintain ongoing communication and liaison with Network medical students and residents and Network faculty
- oversee the quality of their participation, identify and resolve problems, and
- make recommendations to the Family Medicine Network Education Committee concerning the appointment of the Unit Directors.

The chair would also be expected to meet regularly with the Unit Directors for such purposes as coordinating expectations and demands upon Network resources, and reviewing evaluations of both the Nodes and the specific educational experiences provided to the Network's medical students and residents.

Unit Director

The Unit Directors will have had recent and extensive rural practice experience, and are:

- academically accountable to the applicable Family Medicine residency program director for the undergraduate, postgraduate and continuing medical education activities of the Node, and
- to the RPAP CC through the Family Medicine Network Education Committee for financial matters and for Network policy and strategy.

The Unit Directors would also be responsible for:

- providing direction for all aspects of the Node including the selection (working with the Residency Program Directors in selecting residents within the CaRMS process of each University), monitoring and evaluation of its students, the maintenance and evaluation of relevant educational objectives for the Node
- ensuring that the clinical educational experiences are of high quality and founded upon standards of clinical practice that continue to be attractive to students and residents and the Province's Faculties of Medicine
- coordinating and collaborative efforts for the benefit of the Network
- the recruitment of new practice groups and rural faculty and sustaining the commitment and support of participating physicians

- the establishment of an advisory group of Network faculty and staff, medical students and residents for the purposes of planning, coordinating and overseeing respective components of the Node's operation
- maintaining regular communication with the rural faculty, visiting each teaching site on a regular basis
- overseeing the evaluation and development of the clinical and teaching skills of the rural faculty, and to provide recommendations for their academic appointments
- ensuring the Network meets University and CFPC standards and requirements for accreditation
- attending and participating in the applicable Faculty and/or Department of Family Medicine residency program committee
- ensuring the Network selects and prepares trainees for rural practice

The Unit Directors would be appointed by the RPAP CC and the applicable Faculty based upon an appropriately representative search process conducted in collaboration with the Network's stakeholders.

The Unit Directors would need to be at least 0.5 FTE and hold or be eligible to hold a GFT appointment. They will need appropriate support capacity.

Initially, the node's support staff could be purchased for the Faculties, and additional faculty time would be purchased, for example, for specialty training. Rural site coordinators may also need to be appointed and provided with a nominal honorarium.

3. Funding and resources through the RPAP appropriate to support 30-35 new Family Medicine residency positions per year is outlined under the section, **Resources** below.
4. The RPAP CC should cooperate with the relevant stakeholders, including Faculties of Medicine, to move ahead with this report once approved by the Minister of Health and Wellness. Details such items as expectations, accountabilities and issues resolution processes will be paramount.
5. The RPAP CC should work with Alberta Health & Wellness to review the RPAP CC's legal status such that the setting and allocation of the Network budget, and the funding and contracting for services through the RPAP CC may occur.
6. The reallocation of existing Family Medicine residency positions to the Alberta Rural Family Medicine Network is not recommended given the ongoing and currently urgent urban needs for family physicians, especially in Calgary and Edmonton.
7. Through the Network predominant use of rural faculty should occur and the Network's clinical rotations should be held, to the greatest extent, in rural and regional community and hospital practice settings.
8. Curriculum development – the clinical curriculum and academic enhancements - is an area for the two Unit Directors to pursue within the guidelines of the CFPC, the recommendations of their Working Group report, and the recommendations of this report.

The development of the core rural family practice curriculum shall involve the rural and GFT faculty, including the specialty coordinators, in an iterative process before being formally submitted to the applicable Family Medicine department for consideration. This development work should begin with the appointment of the Unit Directors.

9. The current RPAP-funded rural initiatives at the universities, including the rural rotation programs, additional skills training, enrichment training and CME offerings, should be continued at no less than their current funding levels.

IDENTIFICATION OF FOLLOW-UP RESPONSIBILITIES

RECOMMENDATION	FOLLOW-UP RESPONSIBILITIES
#1	RPAP, Alberta Health & Wellness, Faculties of Medicine
#2	RPAP, Alberta Health & Wellness, Faculties of Medicine
#3	RPAP, Alberta Health & Wellness
#4	RPAP, Alberta Health & Wellness, Faculties of Medicine
#5	RPAP, Alberta Health & Wellness
#6	RPAP, Faculties of Medicine
#7	RPAP, Faculties of Medicine
#8	RPAP, Faculties of Medicine
#9	RPAP

RESOURCES

ADDITIONAL EXPENDITURES BY FISCAL YEAR (\$)

A pro forma budget based on the proposed number of 35 new Family Medicine residents per year allocated amongst the two Faculties of Medicine and identifying as many of the cost items – ramp up, one time and ongoing – is provided below:

		Subtotals		Annual subtotals			
				2000/2001	2001/2002	2002/2003	2003/2004
Budget for Rural Stream Setup							
Single Site Setup Items							
Infrastructure	\$5,000						
Informatics	\$5,000						
Communications	\$2,000						
Preceptor Travel	\$1,500						
		\$13,500					
Number of Sites	16						
Subtotal for Sites		\$216,000		\$216,000	\$0	\$0	0
Program Setup & Ongoing Items							
Infrastructure - \$15/sq foot X 5000	\$75,000			\$75,000	\$75,000	\$75,000	
Informatics & Telehealth	\$150,000			\$110,000	\$110,000	\$110,000	
Communications	\$12,000			\$5,000	\$5,000	\$5,000	
Legal Services	\$10,000			\$5,000	\$5,000	\$5,000	
Curriculum Planning & Design	\$40,000						
Rural Faculty Development	\$50,000						
Education Committee Expenses	\$42,000			\$42,000	\$42,000	\$42,000	
Subtotal		\$379,000		\$379,000	\$237,000	\$237,000	\$237,000
Yearly Resident Items							
R1 Resident Salary incl. benefits - 20%	\$41,143						
R2 Resident Salary incl. benefits - 20%	\$44,716						
Resident Informatics support	\$1,000						
ACLS/ATLS reimbursement - PGY1	\$500						
PGY1		\$42,643	\$42,643				
PGY2		\$46,216	\$46,216				
Monthly Resident Items							
Resident Ground Travel	\$150						
Resident Air Travel	\$300						
Resident Accommodation	\$1,000						
Number of Blocks	13						
		\$1,450	\$18,850				

Monthly Preceptor Items							
Preceptor Honoraria	\$1,000						
Preceptor Travel & Faculty Development	\$100						
		\$1,100	\$14,300				
Annual subtotal per Resident - PGY1			\$75,793				
Annual subtotal per Resident - PGY2			\$79,366				
Number of Residents- PGY1	35		\$2,652,747	0	\$1,364,270	\$2,652,747	\$2,652,747
Number of Residents- PGY2	35		\$2,777,815	0	\$0	\$1,428,591	\$2,777,815
				0	\$1,364,270	\$4,081,338	\$5,430,562
Yearly Site Items							
Secretarial support	\$5,000						
Infrastructure support	\$6,000						
Informatics support	\$2,500						
Communication support	\$2,000						
Number of Sites	16						
		\$15,500	\$248,000	0	\$248,000	\$248,000	\$248,000
Yearly Program Items							
Admin Resident Stipends- X 2	\$5,565						
Unit Director - X 2	\$110,000			\$110,000			
Unit Director Travel	\$10,000			\$10,000			
Rural Coordinator - X 2	\$80,000			\$80,000			
Node Infrastructure support	\$70,000			\$70,000			
Research funding	\$24,000						
Program Evaluator - X 2	\$40,000						
Internal & External Evaluation	\$40,000						
Rural Program Coordinator - X 2	\$30,000			\$30,000			
Rural Program Coordinator Travel	\$24,000			\$24,000			
Special Education support	\$50,000			\$50,000			
Rural Academic Dev. Coordinator - X 2	\$110,000			\$110,000			
Rural Academic Dev. Coord. travel	\$10,000			\$10,000			
Rural Faculty Development	\$100,000			\$100,000			
Other	\$50,000			\$50,000			
			\$753,565	\$644,000	\$753,565	\$753,565	\$753,565
Annual Total				\$1,023,000	\$2,602,835	\$5,319,903	\$6,669,127

APPENDIX A

**CFPC WORKING GROUP ON POSTGRADUATE EDUCATION FOR RURAL FAMILY
PRACTICE MAIN RECOMMENDATIONS - 12 MAY 1999**

CORE POSTGRADUATE EDUCATION:

This report has nine major recommendations for effective core education for rural family practice within the two-year Family Medicine program.

1. Core undergraduate rural educational experiences are necessary for all medical students.
 - 1.1. All undergraduate programs should include core rural Family Medicine rotations.
 - 1.2. Opportunities for interested medical students to pursue ongoing and extensive undergraduate education in and secondary medical settings for core specialty medicine or elective rotations need to be developed.
2. Core postgraduate rural/regional community based rotations are desirable within all programs along with sufficient rural elective opportunities for all residents.
 - 2.1. In Family Medicine these community rotations should be no less than eight weeks in duration and occur in rural or regional centres.
 - 2.2. All residents should have access to significant rural electives/selectives in Family Medicine and other disciplines.
3. Rural Family Medicine training streams should be developed as appropriate postgraduate training for rural family practice.
 - 3.1. The number of rural Family Medicine training stream positions should reflect rural health care requirements.
 - 3.2. Family Medicine training programs which have identified community needs for rural family physicians should develop rural training streams for postgraduate trainees interested or intending to practice in a rural setting upon graduation.
 - 3.3. These rural streams should be recognizable to medical students upon CaRMS application (or alternate match in Quebec) and identify trainees upon entrance.
 - 3.4. Postgraduate education specific to rural practice should continue to be offered within the present two-year time frame.
4. Rural Family Medicine training streams should be community-based integrated programs with full academic support.
 - 4.1. The four principles of Family Medicine provide the framework for the development of specific curricula.
 - 4.2. A minimum of six months of postgraduate education should occur in rural settings.
 - 4.3. Including rural rotations in both years of a residency are important.
 - 4.4. Rural Family Medicine postgraduate education should be based in settings where there is an active hospital.
 - 4.5. Residents should have first hand experiences in the provision of clinical services within communities without hospitals.
 - 4.6. The teaching of continuity of care is important and requires specific educational planning in order to incorporate this concept into rural postgraduate education and within each specific rural site. A minimum of four months should occur in at least one rural site.
 - 4.7. The incorporation of horizontal experiences to meet curriculum goals and resident specific learning objectives should be encouraged and explored.

5. The learner-teacher dyad should be based on the preceptorship model for both Family Medicine and specialty-based educational experiences/rotations.
 - 5.1. The guidance of a rural practitioner allows trainees to develop a confidence and belief in their own abilities necessary for safe rural practice.
 - 5.2. Faculty involved in the teaching of rural family practice residents must support the goals of the rural family practice program.
 - 5.3. Rural faculty must be supported and integrally involved in program development and evaluation.
 - 5.4. It is important throughout educational activities that the knowledge, skills, and attitudes required for effective team functioning be developed.

6. Competency in the knowledge, skills and attitudes for rural family practice should be the goal for rural Family Medicine residency training.
 - 6.1. Curricula and educational content should be based on the clinical realities of rural practitioners building on the template of problems and procedures (appendix).
 - 6.2. These curricula should be a collaborative effort between the departments of Family Medicine and the teaching specialties.
 - 6.3. Clear learning objectives based on the knowledge, skills and attitudes for rural family practice should be developed by rural Family Medicine training programs for their overall two-year program and are essential for each rotation within the program.
 - 6.4. Rural Family Medicine residents should have the opportunity to develop their own specific additional learning objectives consistent with the principles of adult learning.
 - 6.5. Formative (in-training) and summative (completion) evaluations should be based on the learning objectives identified by the program, the rotations and individual residents.

7. Hospital experiences or rotations should be appropriate for the residents' learning needs for future rural practice.
 - 7.1. Patient presentations should closely resemble those encountered in and referred from rural practice.
 - 7.2. Clinical workload and educational activities appropriate for the development of the knowledge, skills and attitudes for future rural practice are necessary.
 - 7.3. The teaching obligation to rural Family Medicine residents is of equal importance to other teaching responsibilities (e.g. specialty residents).
 - 7.4. Family physicians have a significant role in-patient care and share a collegial role with specialists within the hospital teaching environment.
 - 7.5. Specialty-based hospital rotations should be developed at regional hospitals.
 - 7.6. Intensive high volume rotations in urban or tertiary hospitals may be required to attain knowledge, skills, and attitudes in areas such as obstetrics, management of trauma, critical care, or psychiatric emergencies.
 - 7.7. Urban or tertiary training must be combined with extensive experience in a rural setting to develop an approach and confidence to manage these clinical problems outside the urban setting.
 - 7.8. University specialty departments have a social responsibility to rural communities to provide appropriate training and referral backup to rural practitioners and their accreditation should include an assessment of their commitment to educating physicians for rural practice.

8. Universities should support and develop rural physician teachers as integral faculty members.
 - 8.1. Funding and infrastructure support for rural physicians involved in teaching activities are essential.
 - 8.2. Physicians involved in supervising and teaching rural training stream residents should receive university faculty appointments and appropriate funding.
 - 8.3. Specialty preceptors should have appropriate faculty appointments ideally in both Family Medicine and their specialty departments.
 - 8.4. Rural faculty should have ready access to library, Internet, and other long distance telecommunication technologies.
 - 8.5. There must be a high degree of local input and control in the university/rural network providing the rural programming.
 - 8.6. Faculty development activities specific to rural faculty are required.
 - 8.7. Rural training programs require an identified co-ordinator with a clear mandate to collaboratively support rural faculty in their training roles and responsibilities.

9. University faculty and programs should nurture and develop present and future rural Family Medicine residents.
 - 9.1. Measures must be instituted/facilitated to allow those interested in working in rural practice to meet, mingle and empathize.
 - 9.2. Barriers such as transportation and additional accommodation costs should be minimized and resident support structures should be developed.

APPENDIX B
WORKING GROUP ON RURAL MEDICAL EDUCATION

PURPOSE:

Reporting to the RPAP CC, the Working Group on Rural Medical Education will study the proposed rural medical stream or program for family physicians to be considered by the Board of the College of Family Physicians of Canada (CFPC) and make recommendations on relevant policy directions for Alberta.

The Working Group will prepare a formal report, which will address the following topics in and associated with rural medical education:

- An assessment of the current two year Family Medicine program relative to the recruitment and retention of rural physicians and an examination of the CPFC's proposed rural Family Medicine program
- The relevant issues pertaining to the introduction of a rural Family Medicine program, including:
 - ⇒ the number of postgraduate (PGY) positions, and the source of funding for these positions, i.e. incremental funds, a reallocation of existing PGY positions, or a combination
 - ⇒ any impact on the undergraduate medical system
 - ⇒ the governance of a rural Family Medicine program
 - ⇒ the number and location of such a program
 - ⇒ any Infrastructure costs
 - ⇒ other relevant issues as the working group may determine
- A work plan for the development, funding, and implementation of a rural medicine program(s) in Alberta.

ACCOUNTABILITY:

The Working Group on Rural Medical Education will report to the RPAP CC.

TIMEFRAME:

An initial report will be developed and submitted to the RPAP CC by 30 September 1999 with the final report being completed by 30 November 1999.

MEMBERSHIP:

Dr. Peter Lindsay, RPAP Coordinating Committee - Chair
Dr. Odell Olson, RPAP Coordinating Committee
Dr. Tim Kolotyluk, past-President, College of Family Physicians of Canada (Alberta Chapter)
Dr. Hugh Hindle, Executive Member, AMA Section of Rural Medicine
(Alternate) Dr. Stu Iglesias
Dr. David Moores, Chair, Department of Family Medicine, University of Alberta
(Alternate) Dr. Rick Spooner, Assistant Director, Residency Training Program
Dr. Peter Norton, Head, Department of Family Medicine, The University of Calgary
(Alternate) Dr. David Topps, Rural Program Coordinator
Robyn Blackadar, Alberta Health & Wellness
Dr. Trevor Theman, Assistant Registrar, College of Physicians and Surgeons of Alberta
Other persons as may be required
David Kay, RPAP Staff

APPENDIX C

RATIONALE & JUSTIFICATION FOR RURAL TRAINING STREAMS

(PREPARED BY DR. DAVID TOPPS, THE UNIVERSITY OF CALGARY)

Background

While it is recognized that the rural training programs of the Universities of Alberta and Calgary have made a fine effort in introducing rural medicine to both undergraduates and residents, there has been some concern expressed that the physician workforce needs of rural Alberta are not adequately addressed. Although the proportion of Alberta graduates choosing to practice in rural Alberta has increased by about 40% during the lifespan of the Rural Physician Action Plan, the actual ratio is still far short of the 40% goal suggested in the Scott Report.¹

Importing physicians from abroad has temporarily reduced the acute deficit of rural physicians – this was always intended as a stopgap measure. There is great concern that future reliance on such a mechanism will ultimately be significantly deleterious to rural recruiting from the ranks of Canadian graduates.

Clearly there is a need to make some substantive changes to the current models of rural medical training. Fine-tuning of the current mechanisms is unlikely to produce the increase in rural recruiting that is needed.

Evidence

Before considering major changes in the delivery of rural medical education, it is wise to see if there are examples from other regions that could indicate which possible models of training are most likely to be successful in producing rural physicians.

To produce some evidence that would be helpful in making these decisions, some members² of the Rural Medical Education Working Group performed a review of the literature. The following search terms were used: manpower planning, rural medical education, internship and residency, medically underserved area. Searches were conducted using Medline via the Alberta Health Knowledge Network³, PubMed from the National Library of Medicine in Boston, and Bullseye Pro – a new Internet meta-search and analysis tool. Expert opinion was sought from a number of world leaders⁴ in rural medical education at the Rural/Remote Medicine Conference

¹ Scott GWS. Small/Rural Hospital Emergency Department Physician Service. A report commissioned by the Ontario Ministry of Health, Ontario Hospital Association, and Ontario Medical Association. 1995:56 p.

² David Topps, David Kay, Peter Norton.

³ AHKN is an online literature search service available at The University of Calgary and The University of Alberta, as a result of pioneering sponsorship by the Alberta Heritage Foundation for Medical Research.

⁴ Dr. Jim Rourke, Director of South West Ontario Rural Medical Program (SWORM), Goderich.

Prof. Roger Strasser, Monash University Centre for Rural Health, Australia.

Dr. John McLeod, Aberdeen University Rural Medical Training Stream, Scotland.

in St John's, Newfoundland, and at the 3rd WONCA World Rural Medicine Conference in Kuching, Malaysia.

A review of the evidence produced the following observations about rural streams and community based residency programs:

1. Such programs greatly enhance rural recruiting, with programs quoting 34-51% of graduates locating their practices in rural and under-served areas, often in the region of the training program. ^{2, 3, 7, 8, 10, 14, 18.}
2. Such programs are significant factors in enhancing the retention of rural physicians, with some studies quoting two decades of experience. ^{12, 13, 19, 20.}
3. Such programs tend to have higher satisfaction ratings in resident and undergraduate evaluations, and graduates feel better prepared for the vagaries of rural practice. ^{4, 6, 10, 15, 16, 20.}
4. Exposure to rural context and physician role models, along with integration into the rural community, are key factors in the decision making process of practice location. ^{9, 16, 17, 6.}

Not all authors who have looked at this area would agree that rural exposure makes a difference to rural recruiting. Three ^{5, 11, 1} out of twenty five papers found no positive association between rural rotations and rural recruiting. The most recent and pertinent of these is a recent paper from Queen's University. ⁵ However, the reviewers from the Rural Medical Education Working Group felt that this study had not taken into account the duration of rural rotation and exposure in their analysis.

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