EVALUATION
OF THE
ALBERTA RURAL FAMILY MEDICINE NETWORK

Prepared For:

ALBERTA RURAL PHYSICIAN ACTION PLAN

Submitted By:

RPM PLANNING ASSOCIATES LIMITED

November 10, 2004

ACKNOWLEDGEMENTS

RPM Planning Associates wishes to express its appreciation to members of the ARFMN Education Subcommittee for all their advice and guidance.

Thanks are also extended to all of the residents and preceptors who took part in an interview. We appreciate that they graciously spent time participating in the evaluation and shared their experiences and views with us.

We also greatly appreciated the assistance provided by the RAS and RAN Unit Directors and the Rural Unit Coordinators throughout the evaluation.

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PURPOSE

The purpose of this Evaluation Report is to present our key findings, conclusions, and points to ponder to the Alberta Rural Physician Action Plan (RPAP) respecting the Alberta Rural Family Medicine Network (ARFMN). This Evaluation Report covers the period January 2003 to June 2004.

BACKGROUND

On March 25, 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. 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 Coordinating Committee (RPAP CC) to take a leadership role.

The RPAP CC established a working group on rural medical education to develop a position on the proposed rural postgraduate curriculum and the rural medical stream for family physicians to be considered by the Board of the College of Family Physicians of Canada (CFPC) and to make recommendations on relevant policy directions for Alberta. The Rural Medical Education Report, prepared by the Working Group, was approved by the RPAP Coordinating Committee on September 28, 1999.

The report outlined 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. The report discussed such issues as:

- the number of postgraduate (PGY) positions and the source of funding for these positions;
- the governance of a rural medical stream for rural family practice in Alberta; and
- the number and locations of streams, and infrastructure costs associated with its introduction.

The RPAP Coordinating Committee submitted the Rural Medical Education Working Group (RME WG) report to the Minister of Health, and given the Minister's initial and positive response, the RPAP Coordinating Committee approved a follow-up work plan at its meeting of December 14, 1999, which involved the establishment of a technical working group to take the RME Working Group report to the implementation stage.

On February 2, 2000 the RPAP CC Rural Medical Education Technical Working Group (RME TWG) began working on an implementation plan for a core postgraduate curriculum and rural medical stream for rural family practice in Alberta. The Technical Working Group completed its report which included nine recommendations together with a specific implementation strategy, status report, funding requirement, responsibility, and timeframe. On March 23, 2000 the RPAP CC approved the recommendations developed by the RPAP CC Rural Medical Education Technical Working Group. The Minister of Health and Wellness formally approved the establishment of the ARFMN on July 20, 2000.

The first cohort of ARFMN residents (2001-2003) was accepted into the Alberta Rural Family Medicine Network in July 2001.

OBJECTIVES AND METHODOLOGY

The Terms of Reference established the following evaluation objectives:

1. Examine the governance and organizational model of the Alberta Rural Family Medicine Network.

2. Assess the effectiveness of the administration of the Alberta Rural Family Medicine Network.

3. Examine the process for engaging, retaining and supporting preceptors—both rural family physicians and specialists in each of the nodes.

4. Examine the way in which the ARFMN provides faculty development to new and existing preceptors and determine the extent to which this training prepares the physicians to effectively carry out their teaching responsibilities within the framework of the Network.

5. Assess the methods used by both the Rural Alberta North (RAN) and Rural Alberta South (RAS) to recruit residents to the ARFMN.

6. Examine the mechanisms used to delivery academic and clinical programming and assess the extent to which:

   (a) the academic preparation received by the ARFMN residents is comparable to academic training in other parts of Canada.

   (b) the ARFMN provides residents with competencies in hospital medicine, as well as rural Family Medicine delivered in physician-based practices.

7. Identify the ways the ARFMN provides academic support to the residents and determine the effectiveness of these approaches.

8. Identify the ways the ARFMN provides non-academic support to the resident and his/her family and determine the effectiveness of these approaches.

9. Assess the extent to which the ARFMN has facilitated residents making a decision to continue working in rural family practice after completion of their rural residency training.

10. Analyze the costs of implementing the Alberta Rural Family Medicine Network and determine whether additional financial resources are required or whether existing resources should be reallocated to further the development of the ARFMN.

11. Examine the extent to which the Alberta Rural Family Medicine Network adheres to the Guiding Principles contained in the Network's March 14, 2000 Implementation Plan adopted by the RPAP Coordinating Committee on March 23, 2000, and reaffirmed at the September 27, 2000 Network Implementation Workshop.

RPM personnel collected information through interviews and a review of relevant documents. In addition, RPM personnel also examined data from the following sources to address the evaluation objectives:

- reports related to the establishment of the ARFMN such as the Report on Rural Medical Education and the Rural Medical Education Implementation Plan, as well as the CFPC Standards for Accreditation of Residency Training Programs;
- Minutes of the RPAP Rural Family Medicine Network Education Subcommittee to determine the specific policy issues addressed and the impact of the policy recommendations;
- data collected by Rural Alberta North and South and the Faculties of Medicine, including surveys completed by residents and preceptors;
- Minutes of the ARFMN Administration Committee (Unit Directors and the RPAP Program Manager) to determine the specific issues addressed and the impact of the recommendations and decisions;
- financial data to assist us in conducting a financial analysis of the program costs associated with the development and implementation of the ARFMN; and
- trend information from the Canadian Resident Matching Service respecting the number of residency spots and the number of available residents.

CONCLUSIONS

Governance of the Alberta Rural Family Medicine Network

There are three key conclusions we can draw from our findings in this section:

1. The governance of the Alberta Rural Family Medicine Network has been working reasonably well.

2. The positive tension created by the different mandates and interests of each stakeholder involved in the governance of the ARFMN binds the organizations together, and ensures that the contributions of each party facilitates movement toward reaching the objectives established for the Alberta Rural Family Medicine Network.

3. The ARFMN Education Subcommittee provides an important focus for Alberta Rural Family Medicine Network and its role should be strengthened to include undergraduate and CME with the addition of the new joint Associate Dean Rural/Regional Health positions.

Recruiting, Retaining, and Supporting Preceptors for the ARFMN

There are seven key conclusions we can draw from our findings in this section:

1. The ARFMN values the work of the preceptors.

2. ARFMN has been proactive in ensuring preceptors understand the expectations of the program and have the skills to deliver the academic and clinical teaching to meet the standards set by the CFPC.

3. Preceptors want detailed feedback shortly after residents have completed a rotation. While this might assist preceptors in determining if they need to make any adjustment to the rotation, it can also create a reluctance on behalf of residents to provide full disclosure of information which can be traced back to them. Both Unit Directors pointed out that if a serious issue arises during a rotation, it is discussed with the preceptor immediately.

4. The “big box” faculty development activities help to increase the skills of preceptors. They are also a vehicle for recognizing the contribution of the preceptors.

5. The Faculty Development Officers of the Department of Family Medicine of both universities had some success in providing appropriate faculty development offerings for the RAN/RAS preceptors. This has been facilitated by the positive working relationship that has developed between the Faculty Development Officers and the ARFMN Unit Directors.

6. Although the Unit Directors have worked diligently with the Faculty Development Officers from the two universities to attempt to deliver more on-site (local) training to ARFMN preceptors, this requires greater attention. Some attempts have been made to have the Unit Directors and the Faculty Development Officers jointly deliver on-site faculty development in local communities. However, attendance has been poor—even though potential participants provide advance notice of their attendance.

   The experience to date suggests this is an expensive way of delivering faculty development at the local level. This does not invalidate the importance of delivering on-site faculty development to preceptors, and the Unit Directors should look for alternative mechanisms to accomplish this objective. For example, the Unit Directors attempt to visit each of the teaching sites once per year. These site visits provide the Unit Directors with opportunities to delivery faculty development to preceptors.

7. The RPAP and the ARFMN provide significant supports to the preceptors. These supports help to develop the capabilities/skills of the preceptors. They also aid in creating a symbiotic relationship between preceptors and the ARFMN—in which each party makes a contribution and receives a benefit. This type of arrangement helps to strengthen the commitment between the preceptors and the ARFMN, resulting in a greater possibility of preceptor retention.

Recruiting Residents to the Alberta Rural Family Medicine Network

There are three six conclusions we can draw from our findings in this section:

1. Involving ARFMN residents in the recruitment and interview processes is valued by both the residents and the candidates and, is an effective recruitment tool.

2. Although the Node information listed on the CaRMS web site is sufficient, candidates value talking with ARFMN residents.

3. The video produced by RPAP called “Hands On” and the CD-ROM are effective recruitment tools.

4. Tours of the ARFMN home bases is a critical component in the recruitment strategy.

5. The fact that the ARFMN is a rural-based program has a significant attraction for candidates.

6. Both Nodes have moved closer to recruiting all of the residents on the first CaRMS Match.

Delivery of Clinical and Academic Programming in the ARFMN

There are four key conclusions we can draw from our findings in this section:

1. Residents believe the clinical and academic programming is sufficient. However, the Unit Directors should strive to provide a greater understanding of the “academic expectations” for R1s and R2s.

2. Residents receive sufficient time with Family Medicine preceptors to obtain both clinical and academic programming.

3. Residents receive sufficient time with specialty preceptors to obtain clinical programming. However, there may be some specialty rotations where adjustments need to be made respecting the amount of time devoted to the provision of academic programming. The Preceptor Evaluation Forms could provide useful information to assist the Unit Directors in identifying if it is necessary to take corrective action.

4. A written Learning Contract is a useful tool to ensure residents and preceptors explicitly identify the expectations for the rotation. It is also a valuable tool for conducting mid-rotation reviews. RAS already uses a written Learning Contract.

   The Resident Training Committee at the University of Alberta recently reviewed the educational evidence for such contracts and decided not to implement them across the system. However, we believe it is important that RAN develop some type of a ‘learner-centred’ mechanism which permits the development of an agreement between the resident and the preceptor of what needs to be learned. This mechanism should be designed in such a way that it can be used as a tool during the mid-rotation review to identify progress made in achieving the agreed upon learning objectives.

RPAP Support to ARFMN Residents

There are five key conclusions we can draw from our findings in this section:

1. The ARFMN provides a significant number of supports which are instrumental to the effective delivery of the program.

2. The ARFMN has experienced significant problems in providing effective Information Technology support to residents. Because the use of Information Technology is a key aspect of the ARFMN, it is still important for the program to provide IT support, but it should be accomplished differently. For example, the ARFMN could provide residents with clinical software and a credit towards the purchase of a PDA If the PDA malfunctioned, the resident rather than the ARFMN, would be responsible for addressing the issue.

3. The value of loaning laptop computers to residents is questionable. The ARFMN should re-examine the utility of this practice because:

   - few residents today use their laptop computers;
   - the number of problems experienced by residents with the computers; and
   - the difficulty residents encounter when trying to expeditiously access support when they experience a problem with the computer.

   However, the ARFMN has an obligation to provide access to reference materials. In the rural sites residents may only have electronic access to library and online resources—which is facilitated through the use of a computer provided by the ARFMN. In addition, when residents take laptop computers on their rural rotations, it allows them to access the Internet independently of the computer systems at the training sites. This is becoming more of an issue as training sites establish 'electronic medical records' and accompanying system safeguards to maintain the integrity of these electronic patient files.

   If the ARFMN decides to continue to loan residents laptop computers, it may be more cost effective in the short term to replace the hardware more frequently. This would continue until there is secretarial support at the home bases, which could provide the necessary administration of a 'depot' where residents would sign out a computer for use in a rural rotation.

4. The orientation for new residents and their families provides significant benefits to these individuals and it should be continued.

5. Residents lack awareness of the support provided by the ARFMN to spouses/partners. The ARFMN should take steps to increase this awareness using all means available—including 'academic days', CaRMS interviews, and the ARFMN Orientation.

Effectiveness Of The ARFMN In Preparing Residents For Rural Practice

There are two key conclusions we can draw from our findings in this section:

1. Residents report that the ARFMN is reasonably effective in preparing them for rural practice and in acculturating them to the rural physician lifestyle. This provides residents with the confidence, attitudes, skills, and competencies to practice rural medicine—and to choose to practice in a rural community.

2. Preceptors in the Family Medicine rotations in rural communities play a pivotal role in acculturating residents to the rural physician lifestyle. This should be emphasized to the preceptors.

Administration of the Alberta Rural Family Medicine Network

There are two key conclusions we can draw from our findings in this section:

1. The administration of the ARFMN is working reasonably well.

2. The interaction between the Regional Site Coordinators and the residents needs to be strengthened. Both Unit Directors have taken specific action to increase the interaction between the Regional Site Coordinators and the ARFMN residents. For example, the RAS Regional Site Coordinators attend weekly rounds and monthly academics, as well as formal individual interviews with residents—which occur every 6 months. The RAN Unit Director re-directs residents to the Regional Site Coordinator for issue resolution. If these approaches fall short of achieving the desired objective, then the Unit Directors may have to require each resident to meet with the Regional Site Coordinator on a prescribed basis, such as once a month or every two months.

Financial Administration of the ARFMN

There are two key conclusions we can draw from our findings in this section:

1. The financial administration of the ARFMN is working reasonably well and has sufficient oversight to ensure the ARFMN Education Subcommittee and the RPAP Coordinating Committee meets its fiduciary responsibility.

2. The Program Delivery Infrastructure Costs have risen by almost 20% between 2003/04 and 2004/05. The addition of new general ledger codes will facilitate appropriate financial management of the Alberta Rural Family Medicine Network.

Adherence to the Guiding Principles Established for the ARFMN

Based on our analysis of the collected information, it can be concluded that there is adherence to all of the guiding principles.

Career Choice of ARFMN Residents

The data show that 55% of ARFMN graduates from the 2001/03 and 2002/04 cohorts are practicing in a rural/regional community (including a Regional Centre such as Red Deer or Grande Prairie), while 29% are practicing in an urban community. Thus, it can be concluded that within a short period of time, the Alberta Rural Family Medicine Network has demonstrated that it is an effective vehicle for increasing the supply of physicians practicing in rural/regional centres in Alberta.

Some could argue, however, that the results achieved to date merely reflect the fact that the residents in the first two cohorts were predisposed to practicing rural medicine and would have selected to practice in a rural site regardless. In the future, the ARFMN will need to develop a longitudinal tracking system to examine the impact of the program in increasing the supply of physicians practicing in rural Alberta. The ARFMN may want to collaborate with the Centre for Rural and Northern Health Research (CRaNHR)—an academic and applied research centre based at Laurentian University—which already has implemented a multiyear tracing study of residents and graduates of the Northeastern Ontario Family Medicine Program.

POINTS TO PONDER

The following is a list of points to ponder based on the evaluation findings and conclusions:

1. The ARFMN Education Subcommittee provides an important focus for Alberta Rural Family Medicine Network and its role should be strengthened to include undergraduate and CME with the addition of the new joint Associate Dean Rural/Regional Health positions.

2. The ARFMN should examine residents' evaluation of a rotation in relation to the written Learning Contract. This will help the Unit Directors determine if there are areas of improvement that should be discussed with preceptors.

3. Although the Unit Directors have worked diligently with the Faculty Development Officers from the two universities to deliver on-site training to ARFMN preceptors, offering more responsive and locally-delivered faculty development requires greater attention.

4. The ARFMN could explore the possibility of engaging a Faculty Development Officer who would work closely with the RAS/RAN Unit Directors and the Faculties of Medicine and their resources to deliver faculty development to ARFMN preceptors at a regional and local level. When exploring this option, the ARFMN needs to determine that: (a) it is in the best interest of the ARFMN; ***and*** (b) it is not a duplication of work currently performed by the Faculty Development Officers from the Faculties of Medicine.

5. Involving ARFMN residents in the recruitment and interview processes is valued by both the residents and the candidates. This should be continued.

6. It is important that RAN develop some type of a 'learner-centred' mechanism which permits the development of an agreement between the resident and the preceptor of what needs to be learned. This mechanism should be designed in such a way that it can be used as a tool during the mid-rotation review to identify progress made in achieving the agreed upon learning objectives.

7. Because the use of Information Technology is a key aspect of the ARFMN it is critical that the Network strengthen its IT support capability.

8. The value of loaning laptop computers to residents is questionable. The ARFMN should re-examine the utility of this practice. However, the ARFMN has an obligation to provide access to reference materials. In the rural sites residents may only have electronic access to library and online resources—which is facilitated through the use of a computer provided by the ARFMN.

   If the ARFMN decides to continue to loan residents laptop computers, it may be more cost effective in the short term to replace the hardware more frequently. This would continue until there is secretarial support at the home bases, which could provide the necessary administration of a 'depot' where residents would sign out a computer for use in a rural rotation.

9. The orientation for new residents and their families provides significant benefits to these individuals and it should be continued.

10. Residents lack awareness of the support provided by the ARFMN to spouses/partners. The ARFMN should take steps to increase this awareness using all means available—including 'academic days', CaRMS interviews, and the ARFMN Orientation.

11. Preceptors in the Family Medicine rotations in rural communities play a pivotal role in acculturating residents to the rural physician lifestyle. This should be emphasized to the preceptors.

12. The interaction between the Regional Site Coordinators and the residents needs to be strengthened. Both Unit Directors have taken specific action to increase the interaction between the Regional Site Coordinators and the ARFMN residents. For example, the RAS Regional Site Coordinators attend weekly rounds and monthly academics, as well as formal individual interviews with residents—which occur every 6 months. The RAN Unit Director re-directs residents to the Regional Site Coordinator for issue resolution. If these approaches fall short of achieving the desired objective, then the Unit Directors may have to require each resident to meet with the Regional Site Coordinator on a prescribed basis, such as once a month or every two months.

13. To examine the impact of the program in increasing the supply of physicians practicing in rural/regional centres in Alberta, the ARFMN, in the future, will need to develop a longitudinal tracking system to examine the impact of the program in increasing the supply of physicians practicing in rural Alberta. The ARFMN may want to collaborate with the Centre for Rural and Northern Health Research (CRaNHR)—an academic and applied research centre based at Laurentian University—which already has implemented a multiyear tracing study of residents and graduates of the Northeastern Ontario Family Medicine Program.

PURPOSE
BACKGROUND
EVALUATION OBJECTIVES
AND
METHODOLOGY

1.0 PURPOSE

The purpose of this Evaluation Report is to present our key findings, conclusions, and points to ponder to the Alberta Rural Physician Action Plan (RPAP) respecting the Alberta Rural Family Medicine Network (ARFMN). This Evaluation Report covers the period January 2003 to June 2004.

1.1 BACKGROUND

Mandate of the Alberta Rural Physician Action Plan

The Alberta Rural Physician Action Plan (RPAP) was established in early 1991 by the Alberta Government as a comprehensive action plan for the education, recruitment and retention of rural physicians.

Since the Plan's inception, an integrated and comprehensive series of initiatives have been implemented "on the basis of influencing physicians' decisions about moving to and remaining in a rural Alberta community."

RPAP achieves its Vision of "having the right number of physicians in the right places, offering the right services in Rural Alberta", and its Mission by:

- "offering a sequential series of initiatives in rural medical education, recruitment and retention; and
- enhancing collaborative partnerships".

RPAP targets its initiatives to:

- Medical students and residents;
- Currently practicing rural physicians and their families; and
- Regional Health Authorities (RHAs) and their partner rural communities.

Rationale for the Development of the Alberta Rural Family Medicine Network

Key studies in the early and late 1990s identified a significant maldistribution of physicians that contributes directly to the problems of providing health care in rural areas.[1] In the late 1990s, approximately 30% of Canadians were considered rural—i.e., living in communities less than 10,000 people. In contrast, only 16% of the family physicians and 3% of specialists in Canada were practicing in rural areas.[2]

The shortage of physicians in under serviced areas is directly related to retention and recruitment factors. Retention factors include work hours, professional backup, specialty services, additional training, hospital services, lack of locums, continuing medical education and earning potential.[3] [4]

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1. Barer, M.L. and Stoddart, G.L., Toward Integrated Medical Resource Policies for Canada. Prepared for the Federal/Provincial/Territorial Conference of Deputy Ministers of Health, 1991.

   Canadian Medical Association, Report of the Advisory Panel on the Provision of Medical Services in Underserviced Regions, CMA, Ottawa, 1992.

   CFPC, Postgraduate Education for Rural Family Practice, 1999.

2. CFPC, Postgraduate Education for Rural Family Practice, 1999.
3. Rourke, James T. B., Politics of rural health care: recruitment and retention of physicians. Canadian Medical Association Journal. 1993 148 (8).

4. The Physician Resource Planning Committee noted in its report to the Minister of Alberta Health and Wellness, entitled Setting a Direction for Alberta's Physician Workforce (2000), that between 1999/2000 and 2004/05 there is a need for an additional 1,329 physician FTEs (610 general practice FTEs and 719 specialist FTEs.

In the 1990s 'reforming medical education' as it pertains to rural medical training had been identified as a key strategy for recruiting physicians to rural medicine.[5] The provision of appropriate training in rural practice was seen as a critical component of this strategy.[6] Specifically, "appropriate education would involve ongoing training suitable for practice in rural areas, from undergraduate medical school and into practice.[7]

In 1998, the College of Family Physicians of Canada established a Working Group on Postgraduate Education for Rural Family Practice to:

- describe the knowledge, skills, and attitudes needed for rural family practice.
- describe the postgraduate training currently provided to prepare family medicine residents for rural family practice.
- outline the core postgraduate curriculum for rural family practice.
- explore the potential for an advanced skills postgraduate curriculum for rural family practice.

The report prepared by the CFPC Working Group on Postgraduate Education for Rural Family Practice included nine major recommendations respecting effective core education for rural family practice—including a recommendation that "rural Family Medicine training streams should be developed as appropriate postgraduate training for rural family practice."[8] This report was approved by the CPPC Board in May 1999.

Origins of the Alberta Rural Family Medicine Network

On March 25, 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. 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 Coordinating Committee (RPAP CC) to take a leadership role.

The RPAP CC established a working group on rural medical education to develop a position on the proposed rural postgraduate curriculum and the rural medical stream for family physicians to be considered by the Board of the College of Family Physicians of Canada (CFPC) and to make recommendations on relevant policy directions for Alberta. The Rural Medical Education Report, prepared by the Working Group, was approved by the RPAP Coordinating Committee on September 28, 1999.

The report outlined 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. The report discussed such issues as:

- the number of postgraduate (PGY) positions and the source of funding for these positions;
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5. Banff Consensus Conference. Recruiting and retention of rural physicians: consensus of the conference participants. Canadian Journal of Rural Medicine. 1996

6. Rourke, James T. B., Politics of rural health care: recruitment and retention of physicians. Canadian Medical Association Journal. 1993 148 (8).

7. Banff Consensus Conference. Recruiting and retention of rural physicians: consensus of the conference participants. Canadian Journal of Rural Medicine. 1996

8. College of Family Physicians of Canada. CFPC Working Group on Postgraduate Education for Rural Family Practice. 1999.

The RPAP Coordinating Committee submitted the Rural Medical Education Working Group (RME WG) report to the Minister of Health, and given the Minister's initial and positive response, the RPAP Coordinating Committee approved a follow-up work plan at its meeting of December 14, 1999, which involved the establishment of a technical working group to take the RME Working Group report to the implementation stage.

On February 2, 2000 the RPAP CC Rural Medical Education Technical Working Group (RME TWG) began working on an implementation plan for a core postgraduate curriculum and rural medical stream for rural family practice in Alberta. The Technical Working Group completed its report which included nine recommendations together with a specific implementation strategy, status report, funding requirement, responsibility, and timeframe. On March 23, 2000 the RPAP CC approved the recommendations developed by the RPAP CC Rural Medical Education Technical Working Group. The Minister of Health and Wellness formally approved the establishment of the ARFMN on July 20, 2000.

The first cohort of ARFMN residents (2001-2003) was accepted into the Alberta Rural Family Medicine Network in July 2001.

Overview of the Alberta Rural Family Medicine Network

The Alberta Rural Family Medicine Network (ARFMN) offers dedicated Family Medicine residency training to prepare competent physicians for the broad demands of rural practice. The Network is a unique collaborative venture of the Alberta Rural Physician Action Plan (RPAP), the Family Medicine departments of the Universities of Alberta and Calgary, and Alberta's rural physicians and rural regional health authorities.

The two-year Family Medicine curriculum provides training mainly in rural and regional community and hospital practices within rural Alberta. The curriculum is taught largely by rural-based family physicians and specialists attached to the Family Medicine and Royal College specialty departments of the Universities of Alberta or Calgary.

Rural Alberta North (RAN) and Rural Alberta South (RAS) work collaboratively and offer a number of joint programs using the academic resources of both units; both parent Family Medicine departments and both Faculties of Medicine. Each node accepts 10 residents per year through the Canadian Resident Matching Service (CaRMS).

Rural Alberta North and Rural Alberta South each have two "home bases". The regional centres of Red Deer and Grande Prairie are the home bases for RAN. The regional centres of Lethbridge and Medicine Hat are the home bases for RAS.

1.2 EVALUATION OBJECTIVES AND METHODOLOGY

1.2.1 Evaluation Objectives

The Terms of Reference established the following evaluation objectives:

1. Examine the governance and organizational model of the Alberta Rural Family Medicine Network.

2. Assess the effectiveness of the administration of the Alberta Rural Family Medicine Network.

3. Examine the process for engaging, retaining and supporting preceptors—both rural family physicians and specialists in each of the nodes.

4. Examine the way in which the ARFMN provides faculty development to new and existing preceptors and determine the extent to which this training prepares the physicians to effectively carry out their teaching responsibilities within the framework of the Network.

5. Assess the methods used by both the Rural Alberta North (RAN) and Rural Alberta South (RAS) to recruit residents to the ARFMN.

6. Examine the mechanisms used to delivery academic and clinical programming and assess the extent to which:

   (a) the academic preparation received by the ARFMN residents is comparable to academic training in other parts of Canada.

   (b) the ARFMN provides residents with competencies in hospital medicine, as well as rural Family Medicine delivered in physician-based practices.

7. Identify the ways the ARFMN provides academic support to the residents and determine the effectiveness of these approaches.

8. Identify the ways the ARFMN provides non-academic support to the resident and his/her family and determine the effectiveness of these approaches.

9. Assess the extent to which the ARFMN has facilitated residents making a decision to continue working in rural family practice after completion of their rural residency training.

10. Analyze the costs of implementing the Alberta Rural Family Medicine Network and determine whether additional financial resources are required or whether existing resources should be reallocated to further the development of the ARFMN.

11. Examine the extent to which the Alberta Rural Family Medicine Network adheres to the Guiding Principles contained in the Network's March 14, 2000 Implementation Plan adopted by the RPAP Coordinating Committee on March 23, 2000, and reaffirmed at the September 27, 2000 Network Implementation Workshop.

1.3.2 Evaluation Methodology

RPM personnel collected information through interviews and a review of relevant documents. Exhibit 1 indicates we conducted 42 interviews during the course of the evaluation.

EXHIBIT 1

NUMBER OF STAKEHOLDERS INTERVIEWED

Type of Stakeholder	Number
ARFMN Residents	
PGY 1: 2001 - 2003: Canadian	5
PGY 1: 2001 - 2003: IMG	4
PGY 2: 2001 - 2003: Canadian	0
PGY 2: 2001 - 2003: IMG	6
Subtotal 2001 - 2003 Cohort	15
PGY 1: 2002 - 2004: Canadian	9
PGY 1: 2002 - 2004: IMG	3
PGY 2: 2002 - 2004: Canadian	0
PGY 2: 2002 - 2004: IMG	1
Subtotal 2002 - 2002 Cohort	13
Total ARFMN Residents	**28**
ARFMN Education Subcommittee Members	3
ARFMN Unit Directors	2
ARFMN Family Medicine Preceptors	7
Family Medicine Residency Program Directors	1
RPAP Program Manager	1
Total	42

RPM personnel also examined data from the following sources to address the evaluation objectives:

- reports related to the establishment of the ARFMN such as the Report on Rural Medical Education and the Rural Medical Education Implementation Plan, as well as the CFPC Standards for Accreditation of Residency Training Programs;
- Minutes of the RPAP Rural Family Medicine Network Education Subcommittee to determine the specific policy issues addressed and the impact of the policy recommendations;
- data collected by Rural Alberta North and South and the Faculties of Medicine, including surveys completed by residents and preceptors;
- Minutes of the ARFMN Administration Committee (Unit Directors and the RPAP Program Manager) to determine the specific issues addressed and the impact of the recommendations and decisions;
- financial data to assist us in conducting a financial analysis of the program costs associated with the development and implementation of the ARFMN; and
- trend information from the Canadian Resident Matching Service respecting the number of residency spots and the number of available residents.

1.3.3 Limitations of the Evaluation

RPM secured sufficient information to address the evaluation objectives.

FINDINGS
AND
CONCLUSIONS

2.0 INTRODUCTION

This section of the report presents our findings and conclusions respecting each of the evaluation objectives noted in section 1.3 (pages 4 and 5).

2.1 GOVERNANCE OF THE ALBERTA RURAL FAMILY MEDICINE NETWORK

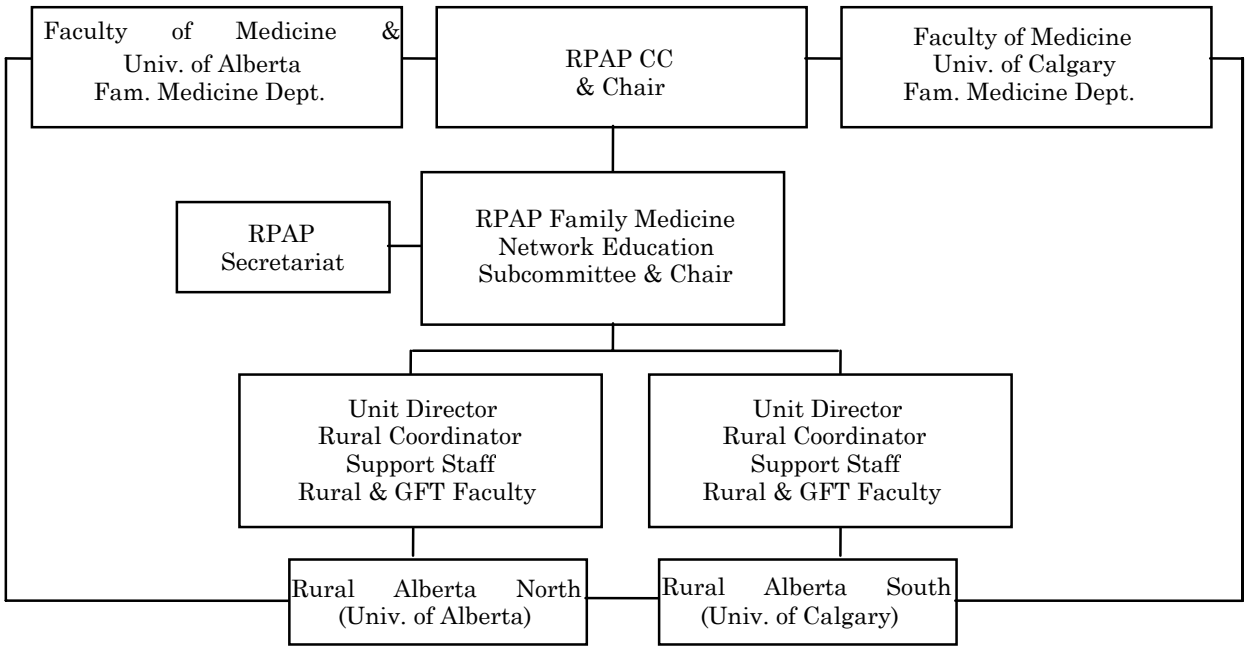
2.1.1 Findings: Governance of the Alberta Rural Family Medicine Network

Exhibit 2 illustrates the governance and organizational model of the Alberta Rural Family Medicine Network. The report of the RPAP Coordinating Committee Working Group on Rural Medical Education (1999), recommended 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 Subcommittee.

The next several paragraphs present our findings respecting the governance of the Alberta Rural Family Medicine Network. The administration of the ARFMN is discussed later in the report.

EXHIBIT 2

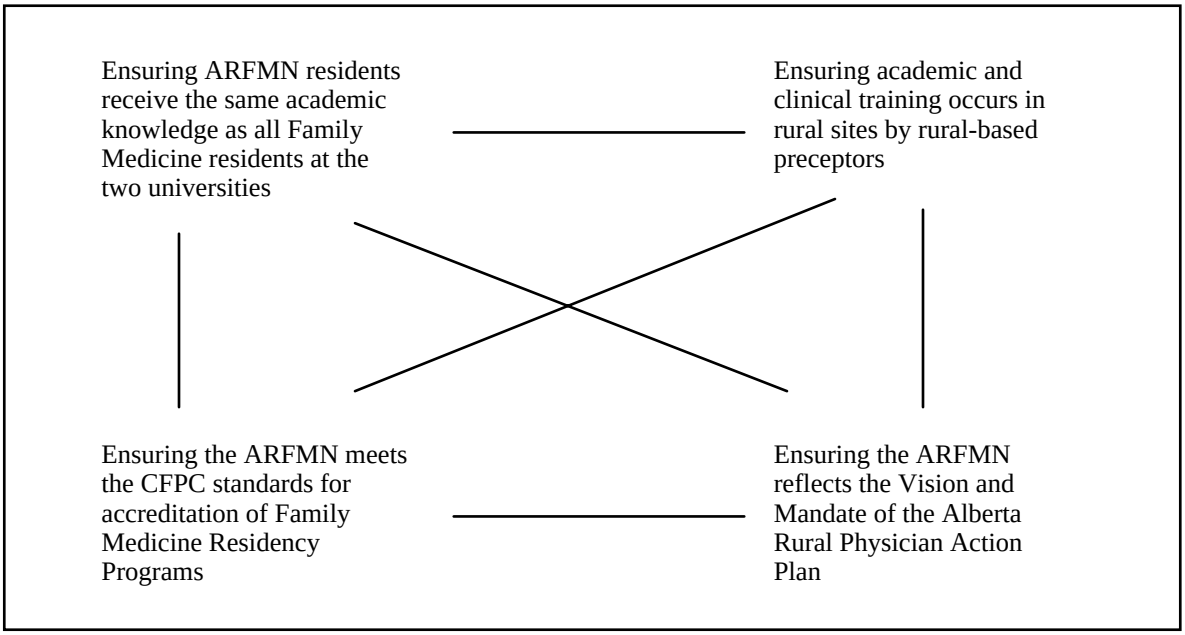
GOVERNANCE AND ORGANIZATIONAL MODEL OF THE ARFMN



The mandates of each stakeholder involved in the governance of the ARFMN can create tension. The term 'tension' often carries a negative connotation. However, in this case, the tension binds the stakeholders together and, as illustrated in Exhibit 3, ensures that the contributions of each party facilitates movement toward reaching the objectives established for the Alberta Rural Family Medicine Network.

EXHIBIT 3

HOW COMPETING OBJECTIVES CREATES POSITIVE TENSION



Effectiveness of Each Component of the Governance Model of the ARFMN

A. Faculties of Medicine at Both Universities

The Faculties of Medicine at both universities play a key role in the operation of the Alberta Rural Family Network. For example, the ARFMN operates academically within the context of the Faculties of Medicine at both universities. Each Node is a 'unit' of the Family Medicine residency program of their respective university. This formal linkage is a requirement established by the College of Family Physicians of Canada for family medicine residency programs.[9]

The Faculties of Medicine at both universities, as well as teaching specialties, were involved in the development approval of the curricula for the Alberta Rural Family Medicine Network. They also provide appropriate training and teaching backup to rural preceptors.

Both Faculties of Medicine support and develop rural physician preceptors as integral faculty members. They also provide RPAP-funded faculty development activities. Physicians involved in supervising and teaching ARFMN residents are expected to receive university faculty appointments. This is a 'site requirement' rather than an 'individual requirement'.

That is, the ARFMN rural teaching sites are supposed to have at least one individual who has a university faculty appointment. The evaluation did not examine the extent to which this happens and whether these preceptors are evaluated by the universities in the same way as GFTs are evaluated.

9. The CFPC Standards for Accreditation of Family Medicine Residency Program (2002) states that a residency training program in family medicine must be based in a university department of family medicine, from which the total training of all residents registered in that program can be developed and coordinated in collaboration with other relevant disciplines within the medical school.

The Faculties of Medicine of both universities have been challenged to achieve a balance between being supportive of an innovative approach to training physicians for rural practice and managing the risk associated with being accountable for the quality of the training provided by the Alberta Rural Family Medicine Network—even though that training takes place outside the two universities.

By not imposing a significant number of university governing and operational policies on the ARFMN, the Faculties of Medicine of both universities have permitted this new program to evolve. This liberal approach to governance exercised by the Faculties of Medicine enabled all partners involved in the initiative to help develop policies which supported the continued evolution of the Alberta Rural Family Medicine Network at different stages in its development.

For example, all parties recognized that the ARFMN would require a system of evaluation, for both residents and preceptors. The stakeholders agreed that in the first few years the ARFMN would use the same evaluation tools employed by the universities' urban-based Family Medicine residency programs. There is an understanding, however, that in the future these evaluation tools should be modified to reflect the actual experience of the ARFMN. In this way the two universities have exercised their accountability for the Alberta Rural Family Medicine Network without unduly burdening it during its initial years. All parties agreed it was unnecessary to have the ARFMN develop evaluation tools which would likely require revision after a few years due to the evolution of the program.

As noted in Exhibit 2, the Unit Directors of both Nodes are academically accountable to the applicable Family Medicine residency program. The Faculties of Medicine of both universities have encouraged the Unit Directors to modify the Family Medicine curricula within the context of the objectives of the ARFMN, as well as the CFPC's standards for accreditation of residency training programs, and its report on Postgraduate Education for Rural Family Practice (1999). This is another example of the Faculties of Medicine of both universities working toward achieving a balance between being supportive of an innovative approach to training physicians for rural practice and managing the risk associated with being accountable for the quality of the training provided by the ARFMN.

Accordingly, the clinical curriculum for the ARFMN, while similar to the main Family Medicine programs at the respective universities, has some variability. For example, the RAN Unit Director's Report (November 2000) indicates that the structure of the Rural Alberta North residency differs somewhat from the urban-based Family Medicine Program at the University of Alberta. Specifically, the Unit Director has increased the amount of Family Medicine time—12 weeks in PGY 1 and 32 weeks in PGY 2. In addition, the RAN Unit Director decided to integrate training in Psychiatry, Care of the Elderly, and Palliative Care into Family Medicine rotations. Moreover, he determined it was important that RAN include some formal training in Anaesthesia.

Similarly, the Unit Director of RAS reported (November 2000) that although the original structure of the Rural Alberta South residency was based on the existing University of Calgary Family Medicine Program to facilitate the CaRMS information process, the structure will likely be modified after the first year. He noted there had already been some changes from the University of Calgary's core program, particularly in the area of ER/Anaesthesia, Internal Medicine/ICU, Psychiatry, and Care of the Elderly/Palliative Care.

The RAN and RAS Unit Directors sit on Accreditation Committees established by the Department of Family Medicine at both universities. Moreover, the RAN and RAS Unit Directors are also members of their respective Family Medicine Residency Program Committees. These forums provide opportunities for discussion and debate, which promote the development of a common vision between the universities and the Unit Directors respecting the ongoing evolution of the Alberta Rural Family Medicine Network.

In addition to supporting the initiative of the Unit Directors to make changes to the curriculum of the urban-based program, the Department of Family Medicine at both universities collaborated in the development of curricula. This includes curricula for Behavioural Medicine, Palliative Care, and Care of the Elderly.

Faculty development is another area in which the two universities have been working to support the goals and objectives of the Alberta Rural Family Medicine Network. The Faculty Development Officers at the U of C and U of A Departments of Family Medicine work collaboratively with the ARFMN Unit Directors to plan and deliver appropriate faculty development offerings. The expectations is that this dialogue results in the delivery of faculty development which strengthens the knowledge, skills, and attitudes of preceptors—thereby increasing their effectiveness in providing academic and clinical education to ARFMN residents. This will be discussed later in the report.

B. RPAP Coordinating Committee and the ARFMN Education Subcommittee

The Rural Physician Action Plan Coordinating Committee (RPAP CC) is the oversight body for the RPAP. Accordingly, the role of the RPAP CC is to ensure the Alberta Rural Family Medicine Network furthers the Vision and Mandate of RPAP. In addition the RPAP Coordinating Committee ensures that the AFRMN is operating within RPAP policy, goals, objectives and performance criteria.

The RPAP Coordinating Committee established the ARFMN Education Subcommittee to:

(1) Recommend policy on issues related to the Alberta Rural Family Medicine Network—including, but not limited to:

- maintaining satisfactory relationships with the University of Alberta and the University of Calgary, Alberta Health and Wellness, the Regional Health Authorities, and other organizations whose support and encouragement are essential
- establishing goals, objectives, strategies, and performance criteria
- introduction of new initiatives.

(2) Receive regular reports on the operation of the Nodes and the Network in general from the Unit Directors and others. These reports shall include, but are not limited to, relevant university and academic matters.

(3) Make recommendations concerning the allocation of the Network budget and contracting for services.

(4) Monitor and review the performance of each Node and the Network in general through the regular discussion of performance indicators.

(5) Ensure the evaluations are conducted as required for each Node and for the Network in general.

(6) Make recommendations to the RPAP Coordinating Committee as the Education Subcommittee determines are necessary.

The RPAP ARFMN Education Subcommittee consists of both appointed voting and ex officio non-voting members. The members of the Education Subcommittee serve for a period of two years, renewable.

The seven voting members include:

- Designates (1) appointed by each Dean of Medicine (total 2)
- RPAP CC Chair
- Rural Regional Medical Director representative (1), nominated by the Council of Medical Directors
- Rural preceptor with a faculty appointment (1) who is nominated by the AMA Section of Rural Medicine
- Rural preceptor with a faculty appointment (1) who is nominated by the CFPC (Alberta Chapter)
- Rural preceptor with a faculty appointment (1) who is nominated by the SRPC

The five ex officio non-voting members include:

- Unit Directors (2)
- "Chief" Residents (2)
- RPAP Program Manager
- Other persons as may be required from time to time

As noted earlier, the Education Subcommittee is primarily responsible for establishing policy which guides operational aspects of the Alberta Rural Family Medicine Network. The Unit Directors are responsible for the day-to-day operations on the ARFMN.

RPM personnel interviewed five members of the ARFMN Education Subcommittee respecting its effectiveness. These individuals acknowledged that the Education Subcommittee provides a forum to balance the interests of the universities—which are concerned with the academic rigor of the ARFMN—with the day-to-day realities of practicing rural-based medicine.

Some of the members we interviewed reported they are dissatisfied with the way in which the ARFMN Education Subcommittee performs it roles. These members would prefer more involvement in further developing the ARFMN and, therefore, they stated the Education Subcommittee should take a greater leadership role in shaping the program. However, other members of the Subcommittee reported they were comfortable with the policy governance approach in which 'developmental/operational' activities are the responsibility of the Unit Directors.

The reports submitted to the Education Subcommittee by both Unit Directors and the Chief Residents provide significant information about the status of the program. They are largely accepted by members of the Subcommittee as 'information' because there are few 'policy' questions emerging from the Unit Directors' reports.

Some Subcommittee members we interviewed stated the Unit Directors should be identifying opportunities for the Subcommittee to assist in resolving issues or suggesting strategic direction for the program. Accordingly, some members of the Subcommittee no longer feel as engaged as they once did in providing their advice and leadership to an innovative program.

It is likely that this feeling of dissatisfaction emanates because there are few policy questions left to be answered. Accordingly, the work of the Subcommittee has changed from providing visionary leadership to oversight.

There is an acknowledgement that there is not as much work today for the Education Subcommittee compared to the first year or two of operation of the ARFMN. In fact, the Subcommittee only meets twice a year.[10] However, the individuals we interviewed believe that the ARFMN Education Subcommittee has been critical in:

- providing a provincial focus for the Alberta Rural Family Medicine Network;
- harnessing the expertise of both universities; and
- ensuring that the rural perspective is dominant in the program.

10. In the first two years of its operation, the ARFMN Education Subcommittee met at a minimum of four times per year, and at the call of the Chair.

2.1.2 Conclusions: Governance of the Alberta Rural Family Medicine Network

There are three key conclusions we can draw from our findings in this section:

1. The governance of the Alberta Rural Family Medicine Network has been working reasonably well.

2. The positive tension created by the different mandates and interests of each stakeholder involved in the governance of the ARFMN binds the organizations together, and ensures that the contributions of each party facilitates movement toward reaching the objectives established for the Alberta Rural Family Medicine Network.

3. The ARFMN Education Subcommittee provides an important focus for Alberta Rural Family Medicine Network and its role should be strengthened to include undergraduate and CME with the addition of the new joint Associate Dean Rural/Regional Health positions.

2.2.1 Findings: Recruiting, Retaining, and Supporting Preceptors for the ARFMN

Overview

The ARFMN Education Subcommittee approved the following principles related to recruiting preceptors for the ARFMN and supporting them:

- the Network will be based upon pivotal and meaningful participation of rural-based clinical faculty supported by full-time faculty;
- there is a need to provide preceptors with detailed expectations for them and their training sites; and
- there is a need to provide faculty development to new and existing preceptors on an ongoing basis.

Within the context of the principles established by the Education Subcommittee, the Unit Directors recruit both Family Medicine preceptors and specialty preceptors. They also work collaboratively with the Faculty Development Officers (U of C/U of A Departments of Family Medicine) to plan and deliver faculty development offerings to meet identified needs of the preceptors.

The Unit Directors provide continuous support for the preceptors. Both Unit Directors encourage ongoing dialogue with these individuals. This facilitates early identification of issues with any resident so that resolution can occur quickly. The Unit Directors also provide some faculty development at individual training sites to support the work of preceptors.

In addition to the support provided by the Unit Directors, the ARFMN Education Subcommittee has approved specific policies designed to support and retain preceptors. For example, the ARFMN reimburses Network preceptors/faculty for the following activities when they occur outside their main teaching location:

- 'loss of practice time';
- 'teaching time';
- 'Network administrative activities'; and
- Network faculty development activities.

The Subcommittee has approved similar policies governing reimbursement to "full-time" faculty and staff with respect to activities that are of direct benefits to the ARFMN residents.

Family Medicine Preceptors

A. Recruitment of Family Medicine Preceptors

Both Nodes utilize many of the same rural Family Medicine preceptors used by the RPAP-funded Rural Rotations Program offered through the urban-based Family Medicine residency programs at the University of Calgary and the University of Alberta. However, prior to the commencement of the Network, both Unit Directors identified the need for additional Family Medicine teaching sites. The Education Subcommittee provided suggested some possible sites for consideration.

Recruitment of additional Family Medicine preceptors involved discussions between the Unit Director and one or more physicians at a potential training site. These discussions primarily focused on the:

- purpose of the ARFMN;
- expectations related to the clinical and academic teaching provided by preceptors and the value to the training site;
- time requirements when working with first and second year residents;
- call expectation for residents (PARA Agreement);

- administrative aspects of being a preceptor—such as completion of evaluations on each resident.

When rural training sites are required by both the RAN and the University of Alberta's urban-based program, the RAN Unit Director works together with the Rural Coordinator from the urban program.

Family Medicine preceptors we interviewed confirmed that the Unit Directors explained the requirements/expectations of the ARFMN. They noted the Unit Directors clarified that preceptors are responsible for:

- orienting residents to the practice, hospital and community;
- organizing the residents' schedules;
- evaluating the residents;
- conducting mid-rotation assessments of the residents' performance;
- ensuring residents were not overworked;
- addressing resident issues that arise during the rotation; and
- helping to arrange accommodation for the residents.

B. Support Provided To Family Medicine Preceptors

Support Provided By The Unit Directors To Family Medicine Preceptors

The Unit Directors indicated during our interviews that they provide continuous support for the preceptors. This includes:

- ongoing dialogue and problem solving respecting issues with residents;
- annual site visits; and
- on-site faculty development.

(i) Ongoing Communication and Annual Site Visits

Both Unit Directors encourage ongoing dialogue with preceptors. This facilitates early identification of issues with any resident so that resolution can occur quickly.

All but one of the Family Medicine preceptors we interviewed reported they are 'very satisfied' with the support provided by the two Unit Directors and the way they perform their roles. However, preceptors reported they would appreciate receiving more contact and feedback from the Unit Directors. Specifically, preceptors want to know if they are meeting the expectations of the ARFMN and whether they should make any specific changes to the rotation, the way they deliver academics, and to the way they interact with the residents.

The Unit Directors indicated during our interviews that they try to visit each Family Medicine training site once a year. The site visits provide opportunities to discuss emergent issues. However, some of the preceptors indicated they have not been visited but would welcome a site visit by the Unit Director.

The preceptors we interviewed are aware that ARFMN residents evaluate the rotation. The Unit Directors synthesize the residents' evaluation of the Family Medicine rotations and provide feedback to each the training site once a year. The preceptors indicated they would like to receive this feedback more frequently so they can make minor adjustments to the rotation on a continuous basis. The Unit Directors aggregate information from the Preceptor Evaluation Forms and examine the data for trends (positive and negative). This feedback is provided to the preceptors. However, both Unit Directors pointed out that if a serious issue arises during a rotation, it is discussed with preceptor immediately.

In 2003 the RPAP Research Assistant conducted a formal review of the evaluations of the rural teaching sites. The Unit Directors pointed out that this work will permit tracking changes over time. In addition, it provides a baseline so that the sites can be reviewed immediately should the need arise.

As noted earlier, some of the ARFMN preceptors were already training sites for the RPAP-funded Rural Rotations Program operated by the two universities. Because these individuals did not have to be 'recruited' to the ARFMN, they may not have received some of the ARFMN program information that the Unit Directors provide to all first-time preceptors. This question arises because one of the preceptors we interviewed, who had been accepting residents on behalf of the urban-based program stated, "I would like to see more of a curriculum from the Unit Director so that I know what the residents need and how I can facilitate their training." He also stated, "we should have some resource material for geriatric medicine that we can use as a resource." These comments suggest that the Unit Director may not have provided sufficient information about the expectations of the ARFMN because he assumed that the preceptor knew what to do because he was already providing training to residents of the urban-based Family Medicine residency program.

(ii) Faculty Development Provided Locally

Since the inception of the ARFMN the Unit Directors have worked to strengthen the teaching skills of preceptors. This is a critical aspect of ensuring ARFMN residents receive the optimum experience.

By the spring of 2002 the Unit Directors had completed a survey of preceptors to identify their faculty development needs. The preliminary findings indicated:

- preceptors prefer the "big box" faculty development events in nice locations (Cabin Fever and Spring Seeding);
- more regional/local faculty development is not popular; and
- most of the identified topics were expected, although there were some unexpected topics such as 'critical appraisal' and 'organizing your office for teaching'.

Notwithstanding that the survey revealed that preceptors preferred the annual "big box" events, the ARFMN Education Subcommittee identified the need to develop smaller faculty development offerings which would be delivered on-site to complement the annual "big box" faculty development events. The Subcommittee identified this as a key strategy in ensuring that preceptors could provide ARFMN residents with a high quality experience.

The ARFMN Unit Directors have been working with the Faculty Development Officers from the Department of Family Medicine at both universities to deliver faculty development to rural and regional sites. A review of reports presented by the Unit Directors to the ARFMN Education Subcommittee shows that:

- A team from the University of Alberta, led by Dr. Spooner (Chair, Department of Family Medicine) and Dr. Chaytors (Faculty Development Officer), held a faculty development session in Grande Prairie in the spring of 2003, and a similar event was planned for Red Deer.
- Increased focus on the RAS regional half-day preceptors with bi-annual meetings and faculty development tailored for them was initiated in March 2003.
- In 2004 the RAN Unit Director suggested the development of a series of short workshops on Power Point that could be presented by the Unit Director or Regional Coordinators during site visits.
- In 2004, Dr. Armson (UofC Faculty Development Officer) and the RAS Unit Director had made short presentations over either lunch or dinner to preceptors at Rocky Mountain House, Raymond/Magrath, and Bow Island. The topics were suggested by the preceptors, or based on either previous questions from the preceptors or apparent needs identified by the Unit Director.

To better meet the faculty development needs of the Network, the Unit Directors are assuming more responsibility for faculty development, and the ARFMN is developing a faculty development web site for its preceptors.

Support Provided by the University of Alberta and the University of Calgary

Both universities support the ARFMN by delivering RPAP-funded faculty development. The following are examples of faculty development activities undertaken by the U of A Faculty Development Officer that have been directed primarily to RAN/RAS preceptors:

- Spring Seeding 2001—which took place at the Fantasyland Hotel, WEM, in Edmonton—focused on how to teach and evaluate residents. Forty rural preceptors attended (20 from each Node).

- Video Faculty Development—the U of A Family Medicine Department runs two faculty development seminars on a monthly basis—research forum and education forum. These had been primarily for the full-time faculty and the urban community faculty. However, in 2001 the Faculty Development Officer started transmitting topics with applicability to rural faculty to various rural communities.

- Spring Seeding 2002—which took place at the Fantasyland Hotel, WEM, in Edmonton—focused on training preceptors in the use of Simulated Office Orals (SOOs). This involved using some didactic discussion of SOOs and of their importance and how they are written. The preceptors worked in small groups and spent time learning how to design and mark a SOO.

- Simulated Office Orals (SOOs)—building on Spring Seeding 2002, the second year RAN residents, in 2003, began videotaping SOOs in their rural sites for review with the Unit Director and rural preceptor.

- Behaviour Medicine—U of A Family Medicine Department has a mandate to teach Behavioural Medicine to the residents and ARFMN rural faculty. This is delivered by faculty travelling to different centres. The U of A Family Medicine Department had hoped to train a significant number of rural preceptors so that they could take responsibility for teaching Behaviour Medicine to rural residents. Regrettably, the attendance by rural preceptors has been low.

- Pearls For Residents—The College of Family Physicians of Canada has produced a manual called Pearls For Residents, which is a series of critical appraisal projects. There is a requirement for the residents to carry out some evidence based medicine exercises in the form of critical appraisal. The Faculty Development Officer agreed that the U of A Family Medicine Department would take responsibility initially for teaching critical appraisal skills using Pearls For Residents. This has involved establishing triads—which includes a first year resident, rural preceptor, and one of the more experienced academic physicians in the Department. The objective is to develop a cadre of rural preceptors trained in Pearls so they can take full responsibility for training residents using these critical appraisal exercises.

The following are examples of faculty development activities undertaken by the U of C Faculty Development Officer that have been directed primarily to RAN/RAS preceptors:

- Cabin Fever 2001—which took place in Kananaskis—focused on teaching techniques when teaching postgraduates.

- Cabin Fever 2002—which took place in Kananaskis—focused on: (a) practical strategies, interactions and techniques to prepare preceptors for their teaching role; (b) encouraging the development of preceptor knowledge and comfort in establishing learning goals with respect to their teaching roles and program goals; and (c) encouraging networking of rural faculty with each other and their urban academic counterparts.

  The retreat included the provision of two educational streams—a set of workshops designed for novice preceptors and a separate set for experienced preceptors. Faculty from both the University of Calgary and the University of Alberta participated in most presentations.

- Cabin Fever 2003—which took place in Kananaskis—focused on the theme “Teaching is more than an office encounter.” There were three educational streams—a set of workshops designed for novice preceptors and a separate set for experienced preceptors, as well as a stream for educational theoretical foundations.

- Short presentations to preceptors in their respective communities.

During our interviews with preceptors and both Unit Directors we asked questions related to the effectiveness of the faculty development. The consensus is that Cabin Fever is 'extremely effective' and Spring Seeding is 'somewhat effective'. Most of these individuals commented that having a different set of workshops designed for novice preceptors and experienced preceptors is a significant factor in the success of Cabin Fever. Preceptors pointed out that the "big box" events provide opportunities to discuss issues with their colleagues—which helps to reduce the 'isolation' of being a rural-based physician.

Some of the physicians we interviewed stated they learned the following things at Cabin Fever or Spring Seeding which assists them as a preceptor for the ARFMN:

- ideas of presenting feedback to residents;
- opportunity to discuss preceptor issues with colleagues; and
- learning how to teach practical skills to residents.

Some of the physicians we interviewed stated there were things that they had wanted to learn at Cabin Fever or Spring Seeding but were not covered sufficiently or at all—such as:

- learning how to deal with problem residents;
- how to provide teaching/instruction to residents in between patients;
- learning how to organize an office to maximize the effectiveness of the experience for both the resident and the preceptor; and
- an understanding of ARFMN's expectations with what a resident should have learned by the end of a Family Medicine rotation.

Some of the preceptors indicated there are other avenues they can use to increase their capabilities/skills as preceptors. For example, one individual noted he is invited by the RAN Unit Director to 1/2-day workshops in Red Deer. However, he rarely attends because he finds it too time consuming. Another preceptor stated he consults with other preceptors and reads the literature as ways of increasing his shills as a preceptor.

Support Provided By The ARFMN and The Rural Physician Action Plan

The ARFMN has approved the following supports to preceptors:

- an honorarium in recognition of the voluntary contribution of the practicing physician to the medical education process and to the profession;
- faculty academic appointments and teaching site plaques;
- no cost to preceptors for attending Cabin Fever and Spring Seeding;
- financial support for some one-time renovations for teaching needs and computer upgrades in preceptor offices;
- support to attend teaching courses, such as the U of T Five Weekend Fellowship, the UWO Masters program, and SEARCH; and
- discount on the purchase of a PDA.

Four of the seven preceptors we interviewed were aware of some of the supports provided by RPAP/ARFMN. One individual suggested that additional feedback from the Unit Director would be helpful concerning the residents' perspective of the rotation. This would help the site make meaningful changes to meet residents' needs/expectations.

2.2.2 Conclusions: Recruiting, Retaining, and Supporting Preceptors for the ARFMN

There are eight key conclusions we can draw from our findings in this section:

1. The ARFMN values the work of the preceptors.

2. ARFMN has been proactive in ensuring preceptors understand the expectations of the program and have the skills to deliver the academic and clinical teaching to meet the standards set by the CFPC.

3. Preceptors want detailed feedback shortly after residents have completed a rotation. While this might assist preceptors in determining if they need to make any adjustment to the rotation, it can also create a reluctance on behalf of residents to provide full disclosure of information which can be traced back to them. Both Unit Directors pointed out that if a serious issue arises during a rotation, it is discussed with the preceptor immediately.

4. The "big box" faculty development activities help to increase the skills of preceptors. They are also a vehicle for recognizing the contribution of the preceptors.

5. The Faculty Development Officers of the Department of Family Medicine of both universities had some success in providing appropriate faculty development offerings for the RAN/RAS preceptors. This has been facilitated by the positive working relationship that has developed between the Faculty Development Officers and the ARFMN Unit Directors.

6. Although the Unit Directors have worked diligently with the Faculty Development Officers from the two universities to attempt to deliver more on-site (local) training to ARFMN preceptors, this requires greater attention. Some attempts have been made to have the Unit Directors and the Faculty Development Officers jointly deliver on-site faculty development in local communities. However, attendance has been poor—even though potential participants provide advance notice of their attendance.

   The experience to date suggests this is an expensive way of delivering faculty development at the local level. This does not invalidate the importance of delivering on-site faculty development to preceptors, and the Unit Directors should look for alternative mechanisms to accomplish this objective. For example, the Unit Directors attempt to visit each of the teaching sites once per year. These site visits provide the Unit Directors with opportunities to delivery faculty development to preceptors.

7. The RPAP and the ARFMN provide significant supports to the preceptors. These supports help to develop the capabilities/skills of the preceptors. They also aid in creating a symbiotic relationship between preceptors and the ARFMN—in which each party makes a contribution and receives a benefit. This type of arrangement helps to strengthen the commitment between the preceptors and the ARFMN, resulting in a greater possibility of preceptor retention.

2.3.1 Findings: Recruiting Residents to the Alberta Rural Family Medicine Network

The Canadian Resident Matching Service

The Alberta Rural Family Medicine Network recruits residents through the Canadian Resident Matching Service (CaRMS). The Canadian Resident Matching Service (CaRMS) is the national organization that serves both eligible applicants and post graduate programs by providing an electronic application service and a computer match for entry into accredited postgraduate medical training in Canada.

The CaRMS match is a comparison of applicants' ranked choices of programs with program directors' ranked choices of candidates. The rank lists are the only determinants of offers and acceptances of postgraduate year 1 (PGY-1) spaces. Each registrant enters a list of preferred programs, while each program director enters a list of preferred candidates. These lists are the basis for performing "the match" based on a computerized mathematical algorithm.

An applicant may be matched with the highest choice on his/her Rank List, provided the program also chooses that applicant before its spaces are filled by applicants whom it ranked higher. If none of the PGY-1 programs selects a particular applicant, that applicant is not arbitrarily "placed" but goes unmatched. Applicants who remain unmatched after the first iteration of the match are eligible to be registered in the second iteration.

ARFMN Recruitment Strategies

Each year the ARFMN establishes a Marketing Plan for the next CaRMS Match. The following are some of the key marketing strategies identified by the Network:

- reaching out to medical students in Alberta and student applicants in the second iteration;
- having the current ARFMN residents establish contact with applicants to the Network and include a 'residents-only component and spousal representation to the orientation held for the candidates;
- involving RAN/RAS residents in the CaRMS interview process with candidates;
- RPAP funding to permit the CaRMS interviews to be held in a superior hotel with meeting rooms;
- offering CaRMS site visits to a home base;
- improving the ARFMN promotional materials—pamphlets, slide shows, and videos;
- introducing medical students to practicing rural physicians through "shadowing" experiences, social events and frequent and early electives.

Information from the ARFMN Resident Representatives' Reports indicates most of the marketing/recruiting strategies worked quite well. For example, the Resident Representatives from both sites noted:

- The video produced by RPAP called "Hands On" that highlights the benefits of choosing rural training was extremely popular with the candidates, and the CD-ROM was well-received.
- Candidates are keen to visit the home bases. In Medicine Hat, for example, the tourism department, economic development, and the mayor came to talk to the potential candidates.
- It is critical to accommodate the candidates in a superior hotel with good meeting rooms. This increases the comfort level of the candidates and facilitates the interviews.
- Having the R1s and the R2s contact the candidates by email is appreciated by the applicants. It also facilitates interaction and meaningful discussion between the candidates and ARFMN residents during the recruitment visit.

During our interviews with ARFMN residents we learned that almost all of the 28 residents had reviewed the information about the Network on the CaRMS system before applying. Most of these individuals noted that although there was sufficient information to make a decision to apply to the ARFMN, they appreciated the opportunity to speak to a resident who was already in the program.

The residents we interviewed indicated they asked ARFMN residents about the following aspects:

- the educational experience in the RAS/RAN "home bases";
- lifestyle in the various RAS/RAN "home bases";
- accommodation in the rural sites; and
- areas of the program that were working well and areas that required improvement.

Some individuals pointed out they had received the CD which provided useful information about the program. Others noted they had spoken to the Unit Director in some detail.

When asked what factors attracted them to the ARFMN, residents most often cited the following two elements:

- it is an evolving program which means things can be changed quickly to meet the needs of residents; and
- because it is a rural-based program and residents are working one-on-one with a preceptor, residents are exposed to a lot of different cases/experiences.

The extent to which the ARFMN is successful in recruiting residents on the first CaRMS Match is an indication of the effectiveness of the recruitment strategies. Exhibit 4 indicates that, in most years, both Nodes have been successful in recruiting a full complement of residents. Moreover, both Nodes have moved closer to recruiting all of the residents on the first CaRMS Match despite the fact that in the 2003 Match there had been a sharp decline among all Canadian Faculties of Medicine in interest in family medicine. The 2003 CaRMS report indicates there had been a 37% drop in the number of applicants to family medicine.

EXHIBIT 4

RESULTS OF THE CaRMS MATCH

Year	Number of RAS Residents	First CaRMS Match	Second CaRMS Match
2001	10	40%	60%
2002	10	30%	70%
2003	10	70%	30%
2004	10	100%	0%
	Number of RAN Residents	First CaRMS Match	Second CaRMS Match
2001	7	43%	57%
2002	10	100%	0%
2003	9	78%	22%
2004	10	80%	20%

2.3.2 Conclusions: Recruiting Residents to the Alberta Rural Family Medicine Network

There are three six conclusions we can draw from our findings in this section:

1. Involving ARFMN residents in the recruitment and interview processes is valued by both the residents and the candidates and, are effective recruitment tools.

2 Although the Node information listed on the CaRMS web site is sufficient, candidates value talking with ARFMN residents.

3. The video produced by RPAP called “Hands On” and the CD-ROM are effective recruitment tools.

4. Tours of the ARFMN home bases is a critical component in the recruitment strategy.

5. The fact that the ARFMN is a rural-based program has a significant attraction for candidates.

6. Both Nodes have moved closer to recruiting all of the residents on the first CaRMS Match.

2.4.1 Findings: Delivery of Clinical and Academic Programming in the ARFMN

Factors Affecting the Delivery of Clinical and Academic Programming

Family Medicine residents of Rural Alberta North and Rural Alberta South receive residency training provided through these units of Alberta's two fully accredited Family Medicine departments. The clinical curriculum offers flexibility with respect to site, sequence and length of experiences. While similar to the main Family Medicine programs and to each other, the curricula of Rural Alberta North and Rural Alberta South have some variability. The general curriculum of both Nodes is composed of core and elective rotations and a schedule of academic events that includes seminars, case presentations, rounds and workshops.

There are two types of factors which influence the way in which academic and clinical programming is delivered—'program/site' factors and 'resident' factors.

'Program/site' factors include:

- policies and resources of the Family Medicine Departments at both universities;
- availability of Family Medicine and specialty preceptors;
- willingness of preceptors to dedicate time to teach;
- teaching and presentation skills of preceptors;
- availability of Family Practice and specialists to make presentations at workshops devoted to specific topics, such as palliative care and geriatric medicine; and
- adequacy of teaching materials, such as the McMaster PBSG modules.

'Resident' factors include:

- interests and experience of each resident;
- willingness of the residents to accept responsibility for their own learning; and
- willingness and ability of residents to communicate to preceptors their expectations of each rotation.

These factors coalesce in a myriad of ways which creates a high degree of diversity in the experience received by ARFMN residents. The CFPC's Standards for Accreditation of Residency Programs establishes the framework for the ARFMN. These standards ensure the Network delivers appropriate academic and clinical programming which enables residents to obtain the necessary skills, attitudes, and competencies to practice rural medicine.

Delivery of Clinical Programming

A. Development of a Learning Contract

Delivery of clinical programming occurs through rotations with specialists and Family Practitioners. Establishment of the expectations of the residents and preceptors is an important component of the clinical programming.

During our interviews with ARFMN residents we asked about the development of a learning contract. Three-quarters of the residents we interviewed indicated that most of their preceptors (75% or more) had developed a learning contract.

These residents indicated that a learning contract helps them to identify the areas they want to cover during a rotation. It also provides a mechanism for preceptors to specify their expectations of the resident. Moreover, the learning contract acts as a vehicle to engage the residents and preceptors in a dialogue during a rotation respecting the extent to which the identified objectives are being met. This provides the opportunity for adjustments during a rotation.

For example, one resident stated that in his general surgery learning contract he specified an interest in gastroenterology and colonoscopy procedures. The preceptor agreed with the

objective and then all the general surgeons asked the resident to assist with these types of cases.

To facilitate the development of a learning contract, the RAS Unit Director requires residents to use a standard Learning Contract Form, which identifies the residents' strengths and areas requiring further development—such as increasing knowledge in areas by the resident, developing certain diagnostic skills, and developing specific therapeutic and procedural skills. The RAS Unit Director expects the residents to complete the learning contract, with the preceptor, within the first week of a rotation.

RAN residents do not use a standard Learning Contract Form. Nonetheless, the RAN Unit Director also expects residents to develop a learning contract, in consultation with each preceptor, to guide the activities of the rotation and the residents' learning experience.

Some residents indicated that in some rotations there was only an oral learning contract. This occurred when preceptors were too busy with their own clinical work to sit down with the resident to complete the paperwork. Residents pointed out they feel uncomfortable "burdening" a busy preceptor with ARFMN paperwork.

During our interviews with seven of the Family Medicine preceptors we asked about the development of a learning contract. Five of the preceptors stated they develop 'verbal' learning contracts with residents. They accomplish this by explaining their practice set-up and the resources available at the teaching site, which helps to clarify the capacity of the site to provide a specific type of learning experience. All five preceptors stated they have informal discussions with the residents throughout the rotation in an effort to target the experience to the needs of the individuals. For example, one of the preceptors pointed out that the conversations with residents help him to assess the capabilities of an individual and their work habits. This information assists the preceptor to determine how closely he needs to watch a resident.

Two of the five preceptors believe the learning contract should be a written document. Moreover, they would like to ARFMN to formalize the process for developing a learning contract to ensure they are fulfilling ARFMN expectations.

Residents and preceptors indicated during our interviews that it is not always possible to meet all of a resident's learning objectives. For example, one resident noted he wanted to do more casting during his orthopaedic rotation. The preceptor pointed out the resident would have more exposure to this procedure during the Emergency Medicine rotation.

Almost 75% of the residents indicated their learning objectives were met in their Family Medicine rotations. Family Medicine preceptors stated that in some situations residents had expressed an interest in a particular area of medicine but none of these types of cases presented during the rotation.

B. Rotations with Preceptors

The rotations comprise two major components—learning and honing clinical skills (including diagnostic, therapeutic and procedural skills) and acquiring academic knowledge. During our interviews with residents:

- 75% stated that most of their preceptors (75% or more) had dedicated sufficient time to providing them with 'case-specific'/case review' discussions; and

- 64% noted that some of their preceptors (40% to 75%) had dedicated sufficient time to providing them with 'academic information/knowledge'.

During Family Medicine rotations residents have their own patients for whom they are responsible. The residents noted that in many of their Family Medicine rotations they met with the preceptor at the end of each clinic day to discuss each patient chart.

During our interviews residents discussed the process some of their preceptors followed when providing academic knowledge. For example:

- One individual noted that during his General Surgery rotation the preceptor would select a topic for discussion and suggest pertinent literature that he expected the resident to read. At a later date, the preceptor would provide the resident with a 'patient profile' and expect the resident to outline his management approach to address the patient's issues. During the discussion the preceptor would make suggestions about the resident's management plan and outline findings from recent journal articles.

- Another resident noted that during his Internal Medicine rotation the preceptor discussed current therapy respecting various diseases. The preceptor also provided the resident with journal articles with the expectation that they would discuss the findings from the literature.

- During an orthopaedic rotation, one resident pointed out that the preceptor assigned readings on specific topics. The next day the preceptor quizzed the resident for 30 minutes on the assigned readings.

- One resident explained that during a Family Medicine rotation, her preceptor presented her with new guidelines for treating hypertension. The preceptor discussed the guidelines as well as practical tips for increasing compliance among hypertensive patients.

During our interviews with the 28 ARFMN residents we asked them about the methods preceptors use to measure their performance. The residents and the seven Family Medicine preceptors agree that the following approaches are used to assess a resident's performance:

- observation with patients—communication, examination, and patient management plans;
- observation of proficiency with specific procedures—suturing, casting, obstetrics, etc.;
- talking to the patient directly;
- chart reviews at the end of most days—patient management plans and choice of medications prescribed for specific conditions;
- mid-rotation review;
- feedback from nursing staff; and
- review of written projects/assignments completed by the resident—e.g., diagnosis and treatment of croup in paediatric patients.

C. Rounding

Clinical programming also occurs when residents conduct patient rounds. The information obtained from the residents indicated 'daily rounds' occur in one of four ways:

- the resident, independent of the preceptor, sees patients he/she admitted to hospital in the morning and then meets with the preceptor to discuss patient management;

- the resident, with the preceptor, sees patients he/she admitted to hospital in the morning and then discuss patient management issues concerning each patient;

- the resident and the preceptor see all patients together that are on the service and then discuss patient management issues concerning each patient; and

- the resident, independent of the preceptor, sees all patients that are on the service and then the resident rounds with the preceptor, during which they discuss approaches to patient management.

The residents have mixed views about the best method of rounding. Some residents prefer the independence of rounding without the preceptor, while others prefer to round with the preceptor because they believe this method facilitates a greater exchange of information/knowledge with the preceptor.

Five of the six Family Medicine preceptors we interviewed have rounds at the hospital. Four of these preceptors prefer the resident to round by him/herself and then to meet with the preceptor to discuss each patient. They believe it is important that the resident develop his/her independence. One of the four preceptors prefers to 'round' with the resident. However, if the resident has admitted a patient, then the preceptor expects the resident to take the lead in examining the patient and determining if a change in the management plan is required.

Delivery of Academic Programming

Almost two-thirds of the residents 'agreed' that the Alberta Rural Family Medicine Network provides them with the ***same level*** of academic preparation as other Family Medicine residency programs in Canada (30% 'agreed strongly' and 35% 'agreed'). However, only 14% of the residents 'agreed' that the Network provides them with a ***better level*** of academic preparation compared to other Family Medicine residency programs in Canada.

During our focus groups with RAN and RAS residents, they pointed out they require a greater understanding of the "academic expectations" for R1s and R2s. The residents also stated it would be helpful if there was more structure in the ARFMN, but acknowledged that too much structure would likely result in decreased flexibility to respond to the needs of the individual residents—a feature which is critical to the success of the Network.

Both ARFMN Nodes (Rural Alberta North and Rural Alberta South) have 'academic day sessions' once a month. The residents accept responsibility for organizing academic sessions.

Both RAN and RAS use the following methods to deliver academic programming:

- video conferencing;
- research projects/presentations;
- Practice-Based Small Group modules (PBSGs); and
- workshops.

In addition, both Nodes use unique methods of delivering academic programming. RAN uses weekly rounds at the hospitals in the two regional centres (Grande Prairie and Red Deer), while RAS uses Journal Clubs.

A. Video Conferencing

RAS residents attend video conferencing sessions from the University of Calgary campus. The presentations are received in either Medicine Hat and Lethbridge. The residents of the urban and rural streams determine the content of the sessions and their delivery.

RAN residents arrange with local specialists to make presentations on specific topics. The regional sites alternate hosting the event.

During our interviews 67% of the residents reported that the video conferencing sessions were 'somewhat effective', and 33% stated they were 'very effective'. The residents indicated that video conferences permit access to knowledgeable presenters without travelling.

There are some problems, however, with the video conferences. Specifically, the residents reported the following difficulties impact the value of the experience:

- inexperienced presenters; and
- difficulty in following the presentation because no handouts are provided to residents in advance of the video conferencing session or during the session.

The Unit Directors also noted the video conferencing does not provide a very good educational experience.

B. Research Projects

Both Nodes require residents to complete two research projects during their residency. In the first year RAN residents are expected to complete 3 PEARLS critical appraisal exercises with the support of their Family Medicine preceptor. In the second year of the program each resident will carry out a project involving practice quality improvement (PQI). Alternatively, more extensive projects may be substituted for the PQI project.[11]

RAS requires completion and presentation of a resident project/PQI and participation in the monthly Journal Club. Individual faculty act as a resource to assist with all critical appraisal and project activities.

Due to the evolution of the ARFMN, the data collection tools used to obtain information for the evaluation did not contain questions related to the 'research projects'—with the exception of the Journal Club. With respect to the Journal Club, one resident assumes the position of Journal Club Coordinator. This person is responsible for developing a list of topics to be explored during Journal Club.

Each month one resident assumes responsibility for organizing the Journal Club which involves selecting an article in relationship to one of the topics identified by the Journal Club Coordinator and emailing the article or the citation to the other residents. The resident also takes responsibility for leading the discussion. Often the article is discussed in conjunction with a PBSG module.

About two-thirds of the RAS residents we interviewed indicated that 'most' (75% or more) of the Journal Clubs were effective. They reported that a Journal Club session was effective when:

- the selected article was germane to the topic;
- the lead resident was well prepared;
- we challenge the information in the article and each other's perspective; and
- the journal article was used in conjunction with a Practice-Based Small Group module.

Residents believe the Journal Clubs would be more effective if a preceptor attended. The expectation is that the preceptor would challenge the group and keep the discussion on topic.

C. Practice-Based Small Group Modules

Each Practice-Based Small Group module includes a family practice case, an evidence-based summary of key information, and relevant patient information sheets (handouts) or chart aids which physicians will find useful in practice. The modules are developed by practicing family physicians and reviewed by specialists in the field.

Eight-three percent of the residents we interviewed reported that 'most' (75% or more) of the PBSGs were effective. The residents stated the PBSGs are:

- very practical and relevant to family medicine; and
- provide a good summary and recommendations about patient management.

Although most residents value using the PBSG modules, they also reported that some of the modules are out of date. They noted this reduces the utility of the PBSG as a teaching tool.

11. Although RAN residents can use the Journal Club as a method for delivering academic programming, it is not a mandatory component in RAN.

D. Workshops

Both RAN and RAS use workshops to supplement the local programming. Content varies widely, covering such topics as behavioural medicine, evidence-based medicine, rural critical care, palliative care, geriatrics, and practice management.

Seventy-five percent of the residents we interviewed reported that 'most' (75% or more) of the workshops were effective. The residents stated the workshops are an effective means of delivering academic programming because:

- the interactive nature of the workshops facilitates learning;
- some workshops provide opportunities to practice specific skills with equipment, such as securing an airway;
- the information discussed with presenters is practical; and
- some workshops include didactic patient/physician simulations which facilitates learning.

The Unit Directors also noted the workshops provide an excellent educational experience.

2.4.2 Conclusions: Delivery of Clinical and Academic Programming in the ARFMN

There are four key conclusions we can draw from our findings in this section:

1. Residents believe the clinical and academic programming is sufficient. However, the Unit Directors should strive to provide a greater understanding of the "academic expectations" for R1s and R2s.

2. Residents receive sufficient time with Family Medicine preceptors to obtain both clinical and academic programming.

3. Residents receive sufficient time with specialty preceptors to obtain clinical programming. However, there may be some specialty rotations where adjustments need to be made respecting the amount of time devoted to the provision of academic programming. The Preceptor Evaluation Forms could provide useful information to assist the Unit Directors in identifying if it is necessary to take corrective action.

4. A written Learning Contract is a useful tool to ensure residents and preceptors explicitly identify the expectations for the rotation. It is also a valuable tool for conducting mid-rotation reviews. RAS already uses a written Learning Contract.

   The Resident Training Committee at the University of Alberta recently reviewed the educational evidence for such contracts and decided not to implement them across the system. However, we believe it is important that RAN develop some type of a 'learner-centred' mechanism which permits the development of an agreement between the resident and the preceptor of what needs to be learned. This mechanism should be designed in such a way that it can be used as a tool during the mid-rotation review to identify progress made in achieving the agreed upon learning objectives.

2.5.1 Findings: RPAP Support to ARFMN Residents

RPAP supports ARFMN residents in several ways, including the provision of:

- a Personal Digital Assistant (PDA—palm pilot or iPAQ) which does not have to be returned;
- a laptop computer during the two year residency program;
- seminars to assist the residents in acquiring competence in using their laptop computer and PDA;
- software for the laptop and PDAs;
- accommodation outside of a resident's 'home base';
- time away from the ARFMN to attend conferences or workshops outside the ARFMN Program;
- travel costs associated with attending academic sessions;
- assistance in addressing the administrative requirements of the ARFMN Program;
- orientation.

For the purpose of this Progress Report, we have reported our findings respecting two of the above noted types of support provided to the residents by RPAP—provision of PDAs and associated support; and accommodation outside of a resident's home base.

Provision OF PDAs, Laptop Computers, And Related Support

ARFMN gives residents a Personal Digital Assistant (PDA) which they keep at the end of the two-year rural residency program. In addition, ARFMN provides clinical software for the PDAs, seminars to assist the residents in acquiring competence in using this technology, as well as limited support for the PDAs.

From an evaluation perspective, it is important to understand if this support, and the associated expense, is warranted. Almost fifty percent of the residents reported they use their PDA 'more than five times per day' for work-related activities.

The data presented in Exhibit 5 show that most of the ARFMN residents interviewed use their PDA for four primary activities: (1) drug databases; (2) reference/diagnostic materials; (3) clinical calculations; and (4) daily organizing/scheduling. During our interviews the residents stated they enjoy the convenience afforded by the PDA when examining a patient or developing a management plan and they have a need to look up information respecting contraindications of a pharmaceutical or the dosage of a specific drug. The utility of the PDA is the software that the ARFMN has made available to residents.

Most of the residents we interviewed stated they found the PDA useful when examining patients and/or developing treatment plans (87%). They noted the PDA assists them in quickly accessing 'reference and diagnostic material' when examining patients. This helps the resident explain a medical condition more fully to the patient, which can help to increase a patient's willingness to comply with the treatment/management plan.

The residents stated ARFMN supports their use of PDAs through seminars, provision of software, and ongoing assistance. In the past year, ARFMN has experienced difficulties providing effective PDA support. The data show that only 50% of the residents believe the PDA support is 'extremely effective', and 36% perceived it is 'somewhat effective'.

Changes in PDA support were made in 2004 to focus on resident-led support.

EXHIBIT 5

FREQUENCY OF USE OF PDAs BY RESIDENTS FOR SPECIFIC ACTIVITIES

Use of the PDA:	Never	Seldom	A Few Times Per Week	A Few Times Per Day	>5 Times Per Day	Total
Drug databases	7%	0%	0%	32%	61%	100%
	2	0	0	9	17	28
Reference/diagnostic materials	7%	4%	11%	46%	32%	100%
	2	1	3	13	9	28
Clinical calculations	14%	29%	21%	22%	14%	100%
	4	8	6	6	4	28
Daily organizer/scheduling	18%	18%	14%	36%	14%	100%
	5	5	4	10	4	28
Best evidence information	15%	48%	19%	11%	7%	100%
	4	13	5	3	2	27
Personal/professional communication	74%	15%	11%	0%	0%	100%
	20	4	3	0	0	27
Research purposes	36%	11%	21%	25%	7%	100%
	10	3	6	7	2	28
Procedural logbook	26%	15%	33%	15%	11%	100%
	7	4	9	4	3	27
Note taking	26%	26%	30%	11%	7%	100%
	7	7	8	3	2	27
Educational presentations	63%	29%	4%	0%	4%	100%
	17	8	1	0	1	27
Patient tracking	71%	22%	7%	0%	0%	100%
	19	6	2	0	0	27

RPAP provides residents with a laptop computer for use during the two-year residency program. Residents use the laptop computer for:

- checking their email;
- research; and
- power point presentations.

During our interviews we asked residents about the usefulness of the laptop computer. The data show that a greater percentage of ARFMN residents from the first cohort (2001-2003) compared to the third cohort (2003-2005) perceives the laptop computer to be 'extremely useful'—87% versus 55%. Residents from the third cohort expressed frustration with what they perceived to be the poor quality of the laptop computers and the lack of support from RPAP in addressing the problems.

Beginning in early 2003, the RPAP patriated many IT services from the UofC, and implemented new and expended e-mail services and a first ever "help-desk" function. Implementation of these changes took longer than anticipated and encountered numerous "glitches" which negatively affected user satisfaction. By the Fall of 2003, these issues were successfully dealt with.

Provision of Accommodation Outside a Resident's Home Base

The ARFMN arranges furnished and conveniently located accommodations in each teaching community for residents on clinical rotation outside their home base. The RPAP, through the Accommodation Support Coordinator, works hard to ensure that all of the accommodations are clean and well maintained. Residents are only responsible for providing personal items.

During our interviews we asked residents about their satisfaction with the accommodation outside of their home base. Most of the residents (88%) stated they were 'satisfied' with the accommodation outside their home base (64% 'very satisfied' and 24% 'somewhat satisfied').

Orientation

The ARFMN has an orientation for all new residents at the end of June—i.e., RAN and RAS residents combined—prior to the university-mandated orientation. Families are invited and there are social activities planned for both residents and their families. All of the residents we interviewed valued the orientation because it provided an opportunity to:

- meet the other residents with whom they would be working for the next two years and begin forming relationships;
- meet the administrators and program staff; and
- develop an appreciation for the program structure and administrative expectations.

All of the residents indicated the orientation was valuable and that it would not have been possible to learn the same things during their residency because shortly after orientation the residents separate as they begin their rotations. The RAS R1s for example, pointed out that shortly after orientation they commenced an 8-week rotation at one of the core rural sites. In the case of the RAN R1s in Red Deer, they begin a 12-week rotation in Red Deer, which comprises 4 weeks of family medicine within the city itself and an 8-week specialty rotation.

Other Supports Provided by the Alberta Rural Family Medicine Network

Almost 75% of the residents who were interviewed were aware of some of the other supports provided by the Network, such as:

- time away from the ARFMN to attend conferences or workshops outside the ARFMN Program;
- travel costs associated with attending academic sessions; and
- assistance in addressing the administrative requirements of the ARFMN Program.

The ARFMN also provides support to the residents' spouse/family—such as including them in orientation and at other events and through the RPAP's Rural Physician Spousal Network. Almost 60% of residents who have a spouse/partner are aware that the ARFMN provides these supports.

2.5.2 Conclusions: RPAP Support to ARFMN Residents

There are five key conclusions we can draw from our findings in this section:

1. The ARFMN provides a significant number of supports which are instrumental to the effective delivery of the program.

2. The ARFMN has experienced significant problems in providing effective Information Technology support to residents. Because the use of Information Technology is a key aspect of the ARFMN, it is still important for the program to provide IT support, but it should be accomplished differently. For example, the ARFMN could provide residents with clinical software and a credit towards the purchase of a PDA If the PDA malfunctioned, the resident rather than the ARFMN, would be responsible for addressing the issue.

3. The value of loaning laptop computers to residents is questionable. The ARFMN should re-examine the utility of this practice because:

   - few residents today use their laptop computers;
   - the number of problems experienced by residents with the computers; and
   - the difficulty residents encounter when trying to expeditiously access support when they experience a problem with the computer.

   However, the ARFMN has an obligation to provide access to reference materials. In the rural sites residents may only have electronic access to library and online resources—which is facilitated through the use of a computer provided by the ARFMN. In addition, when residents take laptop computers on their rural rotations, it allows them to access the Internet independently of the computer systems at the training sites. This is becoming more of an issue as training sites establish 'electronic medical records' and accompanying system safeguards to maintain the integrity of these electronic patient files.

   If the ARFMN decides to continue to loan residents laptop computers, it may be more cost effective in the short term to replace the hardware more frequently. This would continue until there is secretarial support at the home bases, which could provide the necessary administration of a 'depot' where residents would sign out a computer for use in a rural rotation.

4. The orientation for new residents and their families provides significant benefits to these individuals and it should be continued.

5. Residents lack awareness of the support provided by the ARFMN to spouses/partners. The ARFMN should take steps to increase this awareness using all means available—including 'academic days', CaRMS interviews, and the ARFMN Orientation.

2.6.1 Findings: Effectiveness of the ARFMN in Preparing Residents for Rural Practice

During our interviews with residents we asked the following questions, and the results are presented in the next several paragraphs:

- how well is the program preparing you for rural practice?
- to what extent is the program exposing/acculturating you to the rural physician lifestyle?
- have you experienced any difficulty in adjusting to the community?
- did you experience any difficulty in adjusting to the lack of anonymity in the rural communities?

How Well is the ARFMN Preparing Residents for Rural Practice

The data show that the majority of residents (68%) believe the ARFMN is preparing them 'reasonably well' for rural practice. Another 28% stated that the program is preparing them 'extremely well' for rural medicine.

Residents stated they hold these opinions because:

- "we get good exposure to clinical practice and this exposure takes place in rural communities";
- "preceptors teach us with the intent of sending us to practice in rural medicine so we learn what we 'need to know', 'nice to know', and 'those things we shouldn't be doing'—which gives us a lot of confidence;
- "we get hands-on experience—I was on-call in Emergency in a rural community and I was dealing with everything that came in"; and
- "we have the chance to work one-on-one with preceptors which provides us with opportunities to practice lots of procedures".

Some residents expressed a desire for more exposure to obstetrics and paediatrics. Moreover, some residents pointed out that the 'academic programming' should be strengthened. For example, one of the RAN R1s reported "we are not exposed to the same body of knowledge as urban residents. This is a little disconcerting because in medical school we have had four years of didactic teaching and now we are divorced from it."

How Well is the ARFMN Acculturating Residents to the Rural Physician Lifestyle

The data show that almost half of the residents (48%) believe the ARFMN is exposing/acculturating them 'extremely well' to the rural physician lifestyle. Another 30% stated that the program is exposing them 'reasonably well' to the rural physician lifestyle.

Some residents stated, "we are immersed in all aspects of the community—social events, having dinner with our preceptors, and joining the local sporting teams (e.g., hockey team)." Others pointed out the residents have to make an effort to become involved in the community, but not all residents do.

The majority of residents (71%) reported they did not have any difficulty in adjusting to the community. Moreover, the majority of residents (88%) noted they did not have any difficulty in adjusting to the lack of anonymity in the rural communities.

Some of the residents (Canadians and IMGs) who did express problems adjusting to the community noted the preceptors did not help to introduce them to the community or involve them in things after work:

- "I didn't feel welcome in the community—which may have occurred because the preceptor did not help to introduce me to the community";

- "most of the time I felt isolated—I found that the rural preceptors didn't involve me in things after work"; and

- "I was lonely and the preceptors didn't get me involved in the community".

2.6.2 Conclusions: Effectiveness of the ARFMN in Preparing Residents for Rural Practice

There are two key conclusions we can draw from our findings in this section:

1. Residents report that the ARFMN is reasonably effective in preparing them for rural practice and in acculturating them to the rural physician lifestyle. This provides residents with the confidence, attitudes, skills, and competencies to practice rural medicine—and to choose to practice in a rural community.

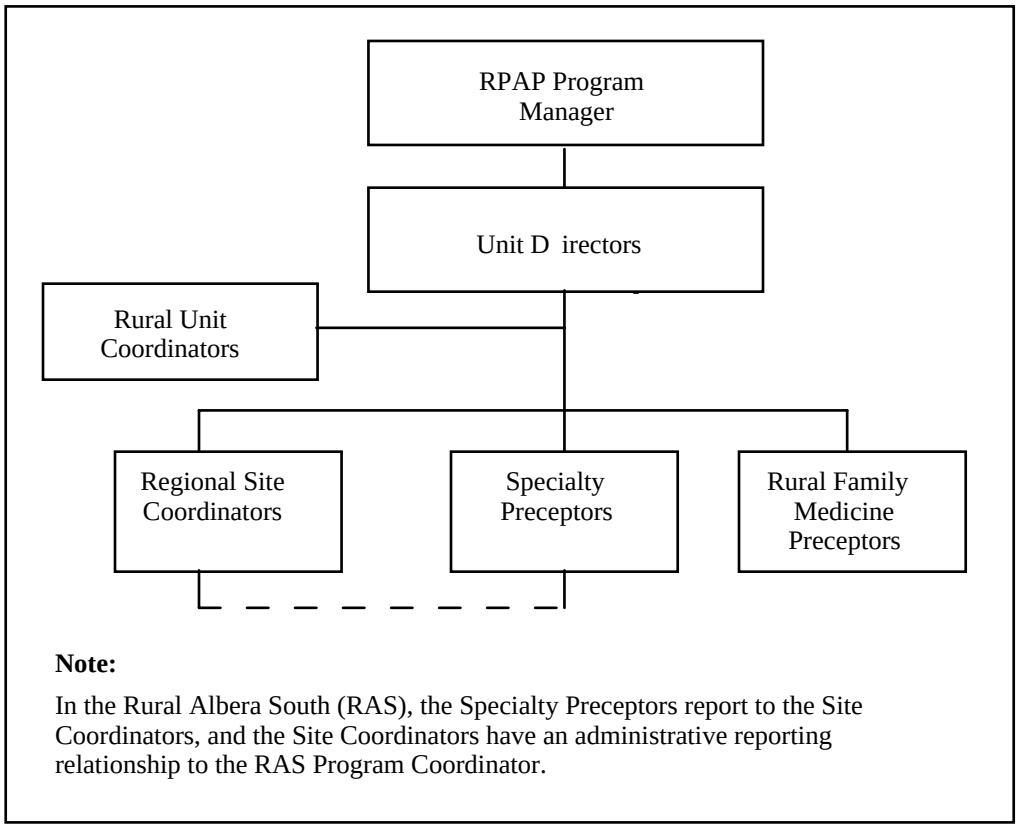
2. Preceptors in the Family Medicine rotations in rural communities play a pivotal role in acculturating residents to the rural physician lifestyle. This should be emphasized to the preceptors.

2.7.1 Findings: Administration of the Alberta Rural Family Medicine Network

Exhibit 6 illustrates the day-to-day administration of the Alberta Rural Family Medicine Network.

EXHIBIT 6

DAY-TO-DAY ADMINISTRATION OF THE ARFMN



Note:

In the Rural Albera South (RAS), the Specialty Preceptors report to the Site Coordinators, and the Site Coordinators have an administrative reporting relationship to the RAS Program Coordinator.

The RPAP Program Manager meets periodically throughout the year with the Unit Directors as the ARFMN administration committee. The discussions focus on financial and policy issues, and RAN-RAS collaboration. The RPAP Program Manager also apprises the Unit Directors of environmental issues which may impact the delivery of the Alberta Rural Family Medicine Network.

The Unit Directors are primarily responsible for:

- liaison with the universities;
- program design;
- coordinating the recruitment of preceptors;
- assisting with faculty development;
- accreditation;
- addressing residents' issues;
- developing remedial plans when required;
- evaluating resident and preceptor performance;
- develop academic programming;
- liaison with support staff at the universities and the regional sites;
- logistical support for the residents—scheduling, workshops, vacation and elective arrangements, arranging for speakers for workshops;

The Rural Unit Coordinators are staff positions responsible for the day-to-day administration of the ARFMN in support of their respective Unite Director and Node, which includes such things as:

- providing residents with information about their rotations;
- providing preceptors with information about each resident;
- ensuring residents and preceptors complete their evaluation forms; and
- reviewing and processing expense claims, vacation time, etc.

The Regional Site Coordinators are responsible for:

- assisting the Unit Directors with the planning, development, operation and promotion of the Node at their training site;
- assisting the Unit Directors with the recruitment of preceptors/faculty;
- resolving relevant local issues; and
- participating in overall program assessment and evaluation.

The data in Exhibit 7 indicate the majority of residents are 'satisfied' with the administration—with the exception of the Regional Site Coordinators. Many of the residents are uncertain as to the roles of the Regional Site Coordinators. In addition, residents stated there is an inconsistency with respect to the assistance provided by the Regional Site Coordinators. For example, RAN and RAS residents pointed out that the Regional Site Coordinator in one of the "home bases" provides a greater level of service compared with the assistance from the Regional Site Coordinator in the other "home base".

Some residents indicated they would appreciate more contact with the Unit Directors. This could be difficult to accomplish given the fact that the Unit Director positions are part-time (approximately 2.5 days per week).

EXHIBIT 7

RESIDENT OPINIONS ABOUT THE ADMINISTRATION OF THE ARFMN

Satisfaction With:	Very Satisfied	Somewhat Satisfied	Neither Satisfied Nor Dissatisfied	Somewhat Dissatisfied	Very Dissatisfied	Don't Know	Total
The Way The Unit Directors Performs Their Roles	60%	24%	4%	0%	4%	8%	100%
	15	6	1	0	1	2	25
The Way The Rural Unit Coordinators Performs Their Roles	71%	25%	0%	4%	0%		100%
	17	6	0	1	0	0	24
The Way The Regional Site Coordinators Performs Their Roles	36%	18%	18%	0%	5%	23%	100%
	8	4	4	0	1	5	22

2.7.2 Conclusions: Administration of the Alberta Rural Family Medicine Network

There are two key conclusions we can draw from our findings in this section:

1. The administration of the ARFMN is working reasonably well.

2. The interaction between the Regional Site Coordinators and the residents needs to be strengthened. Both Unit Directors have taken specific action to increase the interaction between the Regional Site Coordinators and the ARFMN residents. For example, the RAS Regional Site Coordinators attend weekly rounds and monthly academics, as well as formal individual interviews with residents—which occur every 6 months. The RAN Unit Director re-directs residents to the Regional Site Coordinator for issue resolution. If these approaches fall short of achieving the desired objective, then the Unit Directors may have to require each resident to meet with the Regional Site Coordinator on a prescribed basis, such as once a month or every two months.

2.8.1 Findings: Financial Administration of the Alberta Rural Family Medicine Network

The development of the ARFMN budget and the financial administration of the Network receives significant oversight. For example, the ARFMN Education Subcommittee, in conjunction with the RPAP Program Manager, develop a proposed budget for the Network. The Program Manager discusses each line item with the Education Subcommittee, outlining the rationale for changes from the previous year.

After its deliberations, the Education Subcommittee forwards the ARFMN budget to the RPAP Coordinating Committee for its approval. The Program Manager provides information to the RPAP CC to assist the members in their budget deliberations.

Often programs incur two types of costs: one-time non recurring costs, and recurring costs. Typically new programs incur initial one-time 'start up' costs. In the case of the ARFMN, all costs are recurring—even 'teaching site setup costs'. We consider the 'teaching site setup costs' to be intermittent recurring costs, because the Network adds additional teaching sites as required.

The Alberta Rural Family Medicine Network started with five major cost centres:

- Teaching Site Setup:
  - ⇒ infrastructure, informatics, communication, etc.
- Program Setup And Ongoing Costs:
  - ⇒ infrastructure, informatics, legal services, Education Subcommittee costs, etc.
- Trainee Costs:
  - ⇒ salary, informatics, travel, accommodation, preceptor honoraria, etc.
- Teaching Site Costs:
  - ⇒ secretarial support, communications, informatics support, etc.
- Program Delivery Infrastructure and Administration Costs:
  - ⇒ Unit Director stipends, CaRMS interviews and site tours, Rural Program Coordinators salary, Rural Faculty Development Officer stipends, etc.

Throughout the four years of ARFMN operations, expense tracking has steadily improved as new general ledger codes have been added. Concomitantly, financial reports prepared by the RPAP's accounts payable/accounts receivable department - the College of Physicians and Surgeons of Alberta, have improved.

The Rural Physician Action Plan receives grant of $1.9 million from Alberta Health and Wellness to operate the ARFMN. Exhibit 8 presents the budget allocations for the first five years of the Alberta Rural Family Medicine Network.

The data show that 'trainee costs' and 'program delivery infrastructure costs' account for the majority of Network costs (90% in 2004/05). In addition, the Program Delivery Infrastructure Costs have increased by almost 20% between 2003/04 and 2004/05. The new general ledger codes will facilitate appropriate financial management of the Alberta Rural Family Medicine Network.

EXHIBIT 8

ARFMN BUDGET ALLOCATIONS 2000/01 TO 2004/05

Type of Costs	Budget Categories	Allocations				
		2000/01	2001/02	2002/03	2003/04	2004/05
Intermittent Recurring Costs	Teaching Site Setup Costs *	$216,000 19%	$0 0%	$0 0%	$0 0%	$15,000 1%
Recurring Program Development Costs	Program Setup and Ongoing Items	$379,000	$249,000	$294,000	$239,500	$166,000
		34%	12%	13%	13%	9%
Recurring Trainee Costs	Ongoing Trainee Items	$42,690	$676,600	$699,200	$699,200	$731,000
		4%	32%	31%	38%	39%
Recurring Teaching Site Support Costs	Teaching Site Costs	$0	$248,000	$248,000	$96,000	$0
		0%	12%	11%	5%	0%
Recurring Program Delivery Infrastructure Costs	Program Delivery Infrastructure Costs	$490,000 43%	$929,566 44%	$1,015,566 45%	$797,801 44%	$950,000 51%
	Total	$1,127,690	$2,103,166	$2,256,766	$1,900,000	$1,900,000

NOTE: Because it may be necessary to add more teaching sites, the 'Teaching Site Setup Costs' are considered to be 'recurring costs' which occur intermittently as the need arises.

The ARFMN Education Subcommittee has established several policies related to preceptor and resident reimbursement. Each application must be accompanied by a complete and signed ARFMN Expense Claim, with copies of receipts. The RPAP Program Manager reviews every application for clarity and completeness.

2.8.2 Conclusions: Financial Administration of the ARFMN

There are two key conclusions we can draw from our findings in this section:

1. The financial administration of the ARFMN is working reasonably well and has sufficient oversight to ensure the ARFMN Education Subcommittee and the RPAP Coordinating Committee meets its fiduciary responsibility.

2. The Program Delivery Infrastructure Costs have risen by almost 20% between 2003/04 and 2004/05. The addition of new general ledger codes will facilitate appropriate financial management of the Alberta Rural Family Medicine Network.

2.9.1 Findings: Adherence to the Guiding Principles Established for the ARFMN

The ARFMN's Implementation Plan (March 2000) included a set of guiding principles for the Network. The RPAP Coordinating Committee approved these guiding principles and they were re-affirmed at the 27 September 2000 Network Implementation Workshop (see Exhibit 9).

2.9.2 Conclusions: Adherence to the Guiding Principles Established for the ARFMN

Based on our analysis of the collected information, there is adherence to all of the guiding principles.

EXHIBIT 9

ACHIEVEMENT OF THE ARFMN'S GUIDING PRINCIPLES

Guiding Principles	Achievement
The Alberta Rural Family Medicine Network and the core postgraduate curriculum for rural family practice will be implemented within the spirit of the CFPC Working Group on Postgraduate Education for Rural Family Practice and the RPAP CC Rural Medical Education Working Group reports.	Achieved
The Network "nodes" will be affiliated with either the University of Alberta or The University of Calgary, and each node will be accredited through their respective University Family Medicine program.	Achieved
The Network nodes (who have a geographic responsibility) will cooperate to provide access to mandatory and elective opportunities throughout Alberta for students and Residents from both Faculties. They will also cooperate to provide faculty development and support for rural/regional preceptors/faculty.	Achieved
The aim of the Network is, in part, to foster a protected rural stream with similar goal and principles amongst its Nodes	Achieved
The Network nodes will share the same academic half-day and to use videoconference technology to link the Nodes for this.	Achieved (Moderately effective)
The Network nodes will collaborate on faculty development enterprises for the benefit of all preceptors.	Achieved (Moderately effective)
Student applicants will match to the Network through CaRMS and a second internal match would occur to assign the residents to the nodes.	Achieved (in 2003, RAN implemented separate CaRMS codes for Grande Prairie and Red Deer. RAS continues to use an internal match to allocate residents amongst Lethbridge and Medicine Hat).
Agreed to interpret the principle that medical students will match to the Network through either the Rural Alberta North or South nodes of each university.	Achieved
The Network's clinical rotations in Family Medicine and specialty disciplines should occur, to the greatest extent, in rural and regional practice settings.	Achieved
The Network residents should receive a significant rural rotation within their first six months of the program.	Achieved
The Network will be based upon the pivotal and meaningful participation of rural-based clinical faculty supported by full-time faculty, and a high degree of rural input and involvement in the university/rural network providing the rural programming.	Achieved
Agreed on the crucial need to provide faculty development to new and existing preceptors before they get their new residents.	Achieved (Should also be provided at teaching sites)
There is agreement there is the need to define criteria through which to select acceptable training sites.	Achieved
There is agreement there is a need to detail for preceptors the Network's expectations for them and their training sites.	Achieved somewhat
There is agreement that all preceptors would be encouraged to apply for and maintain a Faculty appointment, and that the preceptor who signs the trainee's evaluation must have a Faculty appointment.	Achieved somewhat
There will be close integration of undergraduate, postgraduate and continuing medical education.	Achieved somewhat (Occurs principally through the RPAP Accommodations Support Coordinator)
There is agreement to develop teaching sites both new and existing rural sites that aid both undergraduate and postgraduate medical training.	Achieved
Both Faculties agreed to coordinate Network rotations and the existing RPAP-funded rural rotations.	Achieved somewhat

2.10.1 Findings: Career Choice of ARFMN Residents

Exhibit 10 indicates that more than 50% of ARFMN graduates are practicing in a rural/regional community (including a Regional Centre such as Red Deer or Grande Prairie), while 29% are practicing in an urban community.

EXHIBIT 10

PRACTICE LOCATION OF ARFMN GRADUATES

Practice Location	2001/03 and2002/04 AFMN Cohorts			
	Number of RAS Graduates	Number of RAN Graduates	Total	Percent
Rural				
Rural Regional Centre	5	2	7	23%
Rural Community	2	3	5	16%
Rural Locum Program	2	3	5	16%
Subtotal	**9**	**8**	**17**	**55%**
Urban	5	4	9	29%
Other	3	1	4	13%
Unknown	0	1	1	3%
Total	17	14	31	100%

NOTE: 'Other' includes additional training (3rd year residency training) in a specialty such as 'Emergency Medicine' or 'Paediatrics'.

2.10.2 Conclusions: Career Choice of ARFMN Residents

Within a short period of time, the Alberta Rural Family Medicine Network has demonstrated that it is an effective vehicle for increasing the supply of physicians practicing in rural/regional centres in Alberta. Some could argue, however, that the results achieved to date merely reflect the fact that the residents in the first two cohorts were predisposed to practicing rural medicine and would have selected to practice in a rural site regardless.

In the future, the ARFMN will need to develop a longitudinal tracking system to examine the impact of the program in increasing the supply of physicians practicing in rural Alberta. The ARFMN may want to collaborate with the Centre for Rural and Northern Health Research (CRaNHR)—an academic and applied research centre based at Laurentian University—which already has implemented a multiyear tracing study of residents and graduates of the Northeastern Ontario Family Medicine Program.

POINTS TO PONDER

3.0 POINTS TO PONDER

The following is a list of points to ponder based on the evaluation findings and conclusions:

1. The ARFMN Education Subcommittee provides an important focus for Alberta Rural Family Medicine Network and its role should be strengthened to include undergraduate and CME with the addition of the new joint Associate Dean Rural/Regional Health positions.

2. The ARFMN should examine residents' evaluation of a rotation in relation to the written Learning Contract. This will help the Unit Directors determine if there are areas of improvement that should be discussed with preceptors.

3. Although the Unit Directors have worked diligently with the Faculty Development Officers from the two universities to deliver on-site training to ARFMN preceptors, offering more responsive and locally-delivered faculty development requires greater attention.

4. The ARFMN could explore the possibility of engaging a Faculty Development Officer who would work closely with the RAS/RAN Unit Directors and the Faculties of Medicine and their resources to deliver faculty development to ARFMN preceptors at a regional and local level. When exploring this option, the ARFMN needs to determine that: (a) it is in the best interest of the ARFMN; ***and*** (b) it is not a duplication of work currently performed by the Faculty Development Officers from the Faculties of Medicine.

5. Involving ARFMN residents in the recruitment and interview processes is valued by both the residents and the candidates. This should be continued.

6. It is important that RAN develop some type of a 'learner-centred' mechanism which permits the development of an agreement between the resident and the preceptor of what needs to be learned. This mechanism should be designed in such a way that it can be used as a tool during the mid-rotation review to identify progress made in achieving the agreed upon learning objectives.

7. Because the use of Information Technology is a key aspect of the ARFMN it is critical that the Network strengthen its IT support capability.

8. The value of loaning laptop computers to residents is questionable. The ARFMN should re-examine the utility of this practice. However, the ARFMN has an obligation to provide access to reference materials. In the rural sites residents may only have electronic access to library and online resources—which is facilitated through the use of a computer provided by the ARFMN.

   If the ARFMN decides to continue to loan residents laptop computers, it may be more cost effective in the short term to replace the hardware more frequently. This would continue until there is secretarial support at the home bases, which could provide the necessary administration of a 'depot' where residents would sign out a computer for use in a rural rotation.

9. The orientation for new residents and their families provides significant benefits to these individuals and it should be continued.

10. Residents lack awareness of the support provided by the ARFMN to spouses/partners. The ARFMN should take steps to increase this awareness using all means available—including 'academic days', CaRMS interviews, and the ARFMN Orientation.

11. Preceptors in the Family Medicine rotations in rural communities play a pivotal role in acculturating residents to the rural physician lifestyle. This should be emphasized to the preceptors.

12. The interaction between the Regional Site Coordinators and the residents needs to be strengthened. Both Unit Directors have taken specific action to increase the interaction between the Regional Site Coordinators and the ARFMN residents. For example, the RAS Regional Site Coordinators attend weekly rounds and monthly academics, as well as formal individual interviews with residents—which occur every 6 months. The RAN Unit Director re-directs residents to the Regional Site Coordinator for issue resolution. If these approaches fall short of achieving the desired objective, then the Unit Directors may have to require each resident to meet with the Regional Site Coordinator on a prescribed basis, such as once a month or every two months.

13. To examine the impact of the program in increasing the supply of physicians practicing in rural/regional centres in Alberta, the ARFMN, in the future, will need to develop a longitudinal tracking system to examine the impact of the program in increasing the supply of physicians practicing in rural Alberta. The ARFMN may want to collaborate with the Centre for Rural and Northern Health Research (CRaNHR)—an academic and applied research centre based at Laurentian University—which already has implemented a multiyear tracing study of residents and graduates of the Northeastern Ontario Family Medicine Program.