EVALUATION OF THE RPAP
CME FOR RURAL PHYSICIANS

FINAL REPORT

Prepared For:

RURAL PHYSICIAN ACTION PLAN COORDINATING COMMITTEE

Submitted By:

RPM PLANNING ASSOCIATES LIMITED

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RPM Planning Associates wishes to express its appreciation to members of the Steering Committee for all their advice and guidance during the evaluation. Thanks are also extended to all of the physicians who participated in the evaluation.

We would also like to express our gratitude for the insights we received from representatives from the Faculties of Medicine at the University of Calgary and the University of Alberta during the evaluation. The information provided insight into past directions and future possibilities.

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The Steering Committee was composed of:

Dr. Peter Lindsay	RPAP Coordinating Committee
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TABLE OF CONTENTS

EXECUTIVE SUMMARY

PURPOSE

The purpose of this Evaluation Report is to present our key findings, conclusions and recommendations to the Rural Physician Action Plan Coordinating Committee respecting the effectiveness of CME Programs for Rural Physicians.

BACKGROUND

The Government of Alberta established Alberta's Rural Physician Action Plan (RPAP) in early 1991, as a comprehensive action plan for the recruitment and retention of rural physicians. Since the Plan's inception, over one dozen initiatives, some medium and others long term in nature, have been implemented "on the basis of influencing physicians' decisions about moving to and remaining in a rural Alberta community". The Plan strives to address the professional and lifestyle issues that influence physician recruitment and retention.

The division/office of Continuing Medical Education at both Alberta universities work with rural physicians to provide high quality CME to meet the needs of rural Alberta. Programming at the two universities differs in content, however each university provides regional conferencing and teleconferencing sessions on a regular basis. In addition, The University of Calgary provides a Virtual Library as part of the RPAP-funded Medical Information Service (MIS) for physicians.

The goal of CME Programs for Rural Physicians is to strengthen existing health care services in rural communities by: encouraging the maintenance of medical services to rural communities, facilitating the recruitment of physician [and allied professionals] to rural communities by reducing the professional isolation, and promoting the transfer of modern medical practices.

EVALUATION OBJECTIVES AND METHODOLOGY

The Terms of Reference specified the following objectives for the evaluation of the CME Programs for Rural Physicians:

- Assess stakeholder participation and satisfaction with CME programs for rural physicians.
- Evaluate the extent to which the U of C and U of A are meeting the current and future CME needs of rural physicians, i.e. content and delivery methods.
- Assess the extent of cooperation between the University of Alberta (U of A) division of CME and the University of Calgary (U of C) office of CME and Professional Development regarding CME programs for rural physicians.
- Examine the need for two RPAP-funded CME programs for rural physicians.
- Evaluate the extent to which these programs are meeting their stated objectives and the goals of the RPAP (i.e. aid rural physician recruitment and retention).

RPM personnel obtained information from the following sources to address the evaluation objectives:

- relevant documents such as the RPAP Business Plan, the Final Report of the University of Alberta's Rural Family Medicine CME Needs Assessment Report, the CFPC's JANUS findings for Alberta, specific course offerings, and a brief review of the literature for the factors that motivate physicians to participate in Continuing Medical Education;
- program statistics such as the number of rural physicians attending specific types of CME courses in the last three years;
- interviews with:
  - 57 rural practicing physicians who have participated in CME course offerings;
  - 12 physicians who have delivered CME courses in the last 2 years;
  - 4 Regional Medical Directors;
  - personnel from Alberta We*ll*net (Telehealth); and
  - personnel from U of A and U of C CME offices.

There are two limitations of the evaluation of the effectiveness of CME Programs for Rural Physicians. Neither of these limitations compromises the value of the evaluation or our ability to address any of the objectives specified in the Terms of Reference.

First, the literature review was not exhaustive. Accordingly, there may be other insights from the literature that could assist the University of Calgary and the University of Alberta to increase their effectiveness in delivering CME to rural physicians.

Second, we did not interview a representative random sample of rural physicians who have accessed CME through the two universities. Rather we chose our sample using 'purposive sampling' which is a non-probability sampling technique. The evaluator purposively chooses participants for the sample, based on specific a priori criteria, to capture and describe the central themes or principal outcomes that cut across a great deal of participant or program variation. To appropriately evaluate the effectiveness of CME Programs for Rural Physicians our sample included individuals who attended a significant number of CME courses, as well as physicians who participated in a moderate number of activities, and some who only attended a few.

FINDINGS AND CONCLUSIONS

Evaluation Objective #1: Assess stakeholder participation and satisfaction with CME programs for rural physicians

The evaluation confirmed that rural physicians have a keen interest in pursuing CME activities, particularly when the topics are relevant to patient care issues, and the courses are at a convenient location.

Evaluation Objective #2: Evaluate the extent to which the U of C and U of A are meeting the current and future CME needs of rural physicians, i.e. content and delivery methods

The evaluation confirmed that rural physicians choose to participate in CME activities delivered through the University of Calgary and the University of Alberta—particularly through attendance at Regional Conferences and Seminars. In addition, the evaluation confirmed that rural physicians believe the two universities should take a leading role in harnessing the Internet and other technology, such as telehealth, to deliver CME courses.

Evaluation Objective #3: **Assess the extent of cooperation between the University of Alberta (U of A) division of CME and the University of Calgary (U of C) office of CME and Professional Development regarding CME programs for rural physicians**

The evaluation confirmed that there is minimal collaboration between the two universities regarding the development and delivery of CME for rural physicians. The RPAP could play a significant leadership role in helping to harness the expertise and talent that currently exists at both universities in their respective Offices of CME.

Evaluation Objective #4: **Examine the need for two RPAP-funded CME programs for rural physicians**

The evaluation confirmed that there is a need to maintain two RPAP-funded CME programs for rural physicians. Without RPAP funding, the universities would have insufficient resources to retain existing personnel who are responsible for designing CME activities. This would have a negative impact on the ability of the universities to deliver appropriate CME activities to physicians in Alberta—including rural physicians.

Evaluation Objective #5: **Evaluate the extent to which the CME Programs for Rural Physicians are meeting their stated objectives and the goals of the RPAP (i.e. aid rural physician recruitment and retention)**

The evaluation confirmed that physicians perceive that CME has a positive impact on retaining rural physicians. U of A and U of C both arrange for the delivery of CME activities in rural locations, which assists rural physicians to increase their knowledge and skills without having to practice in an urban community. The CME courses offered to rural physicians help these individuals to increase their skills, knowledge and confidence.

However, most of the rural physicians interviewed during the evaluation, and CME instructors believe CME has no impact or a modest effect on recruiting physicians to rural communities.

RECOMMENDATIONS

There is a need for change in some aspects of the CME Programs for Rural Physicians. Therefore, the intent of the following recommendations is to provide guidance to facilitate the effective and efficient delivery of CME to rural physicians. The recommendations have ***not been prioritized***.

RECOMMENDATION #1:

It is recommended that CME speakers/instructors should have a recognized reputation in the areas in which they teach. They should also have the appropriate knowledge and skills to present to participants new/different methods physicians can use to address specific patient issues.

Explanatory Note:

To facilitate effective and meaningful dialogue between the instructors and rural physicians attending a CME course/activity, it is critical that instructors have knowledge of the practice of rural medicine in Alberta.

RECOMMENDATION #2:

It is recommended that RPAP work with the University of Alberta and the University of Calgary, as well as other stakeholders—such as the AMA—to find ways to minimize the financial costs incurred by physicians when attending a CME activity:

Explanatory Note:

Physicians incur three types of financial costs when attending a CME activity: (1) the fee for the course; (2) the cost of travel; and (3) the cost associated with lost revenue because of time spent away from his/her clinic practice.

RECOMMENDATION #3:

It is recommended that the University of Calgary and the University of Alberta strive to deliver CME activities, which provide significant insights about patient-care issues confronting rural physicians.

RECOMMENDATION #4:

It is recommended that the University of Calgary and the University of Alberta strive to deliver CME activities in locations, which are easily accessible to a large number of rural physicians at any one time.

RECOMMENDATION #5:

It is recommended that the University of Alberta and the University of Calgary consider increasing the number of Regional Conferences, Seminars, and MainPro-C courses offered to rural physicians.

RECOMMENDATION #6:

It is recommended that the RPAP take a leadership role in facilitating coordination between the University of Alberta and the University of Calgary in meeting the currently identified CME needs of rural physicians, including harnessing new technology—such as the internet and telehealth—in delivering CME to physicians located in rural communities.

RECOMMENDATION #7:

It is recommended that the RPAP establish a Task Group composed of the College of Physicians and Surgeons of Alberta, the University of Calgary and the University of Alberta, Regional Health Authorities (through the Council of Medical Directors), the AMA (Section of Rural Medicine), and representatives of the pharmaceutical industry to discuss ways of meeting the currently identified CME needs of rural physicians.

Explanatory Note:

During its explorations, the Task Group may identify circumstances where it is advantageous for the organizations to pool their resources to address some of the identified CME needs of rural physicians.

The mandate of the Task Group should also include identifying topics of interest to rural physicians in Alberta, for instance: (a) the appropriate use of specific types of pharmaceutical such as antibiotics and antihypertensives; and (b) strategies of disease-management for specific types of chronic diseases including diabetes and asthma.

The Task Group should also examine emerging needs in CME for rural physicians based on national and provincial trends.

Since the College of Physicians and Surgeons of Alberta has a vested interest in ensuring physicians strive to increase their knowledge of new/different

methods of meeting the needs of their patients, it is a key participant on the Task Group.

RECOMMENDATION #8:

It is recommended that the RPAP continue to fund the CME Programs for Rural Physicians at both the University of Calgary and the University of Alberta.

RECOMMENDATION #9:

It is recommended that the RPAP work with both the University of Calgary and the University of Alberta to develop strategies for recruiting a sufficient cadre of instructors to deliver CME to rural physicians. This may involve providing an honorarium to individuals for delivering CME to rural physicians.

Explanatory Note:

Both the University of Calgary and the University of Alberta are experiencing difficulty in recruiting instructors to deliver CME to rural physicians—particularly because neither institution pays instructors an honorarium recognizing their contribution. The two universities continue to rely on the same instructors each year. These individuals are reluctant to continue to deliver CME to rural physicians without any remuneration for their time.

In addition, the pharmaceutical companies often recruit the same instructors as the universities—but pay these individuals for the time they are delivering CME. This competition for instructors is another factor, which hampers the ability of the University of Calgary and the University of Alberta to recruit individuals to deliver CME to rural physicians.

PURPOSE
BACKGROUND
EVALUATION OBJECTIVES
AND
METHODOLOGY

1.1 PURPOSE

The purpose of this Evaluation Report is to present our key findings, conclusions and recommendations to the Rural Physician Action Plan Coordinating Committee respecting the effectiveness of CME Programs for Rural Physicians.

1.2 BACKGROUND

The Government of Alberta established Alberta's Rural Physician Action Plan (RPAP) in early 1991, as a comprehensive action plan for the recruitment and retention of rural physicians. Since the Plan's inception, over one dozen initiatives, some medium and others long term in nature, have been implemented "on the basis of influencing physicians' decisions about moving to and remaining in a rural Alberta community". The Plan strives to address the professional and lifestyle issues that influence physician recruitment and retention.

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1.3 EVALUATION OBJECTIVES AND METHODOLOGY

1.3.1 EVALUATION OBJECTIVES

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1.3.2 EVALUATION METHODOLOGY

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- personnel from U of A and U of C CME offices.

1.3.3 LIMITATIONS OF THE EVALUATION

There are two limitations of the evaluation of the effectiveness of CME Programs for Rural Physicians. Neither of these limitations compromises the value of the evaluation or our ability to address any of the objectives specified in the Terms of Reference.

First, the literature review was not exhaustive. Accordingly, there may be other insights from the literature that could assist the University of Calgary and the University of Alberta to increase their effectiveness in delivering CME to rural physicians.

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FINDINGS
AND
CONCLUSIONS

2.0 INTRODUCTION

This section of the report provides a brief discussion, from the literature, of the factors that motivate physicians to participate in Continuing Medical Education. In addition, we present our findings and conclusions respecting each of the objectives for the evaluation.

2.1.1 INTRODUCTION: SELECTIVE REVIEW OF THE LITERATURE

In this section of the report, we provide insights from the work of Dr. H.B. Slotnick. He has researched and written extensively about the factors motivating physicians to participate in Continuing Medical Education. Moreover, Dr. Slotnick has developed specific theories and tested these in a number of landmark research studies in the United States.

2.1.1 FINDINGS: SELECTIVE REVIEW OF THE LITERATURE

Slotnick has conducted extensive research respecting how physicians learn and their motivations for participating in Continuing Medical Education (CME) (1995, 1996, 1999). Drawing on the work of the psychologist Abraham Maslow (1954), Slotnick indicates physicians participate in CME activities to achieve 'security', 'affiliation', and 'self-esteem'. For example, Slotnick states, "when the doctor learns what to do and what to expect as the patient responds to the management of her illness, the future is more predictable and the physician can behave as if the threat to her security need has been addressed." (Slotnick, 1996). Similarly, when physicians are confident/secure about their knowledge and skills concerning how to deal with a clinical problem, they feel good about themselves (self-esteem) and they feel they are a valued member of the physician community (affiliation).

In attempting to determine the factors that motivate physicians to participate in CME activities, Slotnick and his colleagues (1995) have drawn insights from adult learning theory (ALT). They point out, "this theory indicates that physicians are: (1) practical learners (i.e., they seek learning to solve problems of specific importance to them); (2) they wish to participate actively in their own learning; and (3) they have multiple demands on their lives." They also believe CME participation "allows physicians to address the psychological needs of security, affiliation, and self-esteem."

Slotnick has drawn from the work of Schön (1984) in determining how learning takes place. Specifically, Slotnick notes that an individual's prior experience in dealing with problem situations, directly affects the approaches an individual selects to any similar problem. According to Schön, these include both: (1) experiences gained in the course of approaching and solving the problems—***reflecting-in-action***; and (2) the experience that came through considering the problems, their solutions, and the solutions' impacts afterwards—***reflecting-on-action***.

Davis and colleagues (1994) developed a model relating attributes of instructional activities to effects on physicians' practices. Slotnick (1996) points out Davis et al. "argue that primary instructional interventions in CME should be problem-based or should otherwise involve participating physicians in the learning process."

In addition, secondary interventions can help physicians to recall what was learned during the CME activity. For example, Davis and colleagues suggest using stickers to flag the charts of patients treated for the disease process that was the object of the CME instruction. The purpose of the flags and reminders is to ensure that the physician will raise particular issues with the patients when they are seen.

Chart reviews is another secondary intervention, which provides feedback to the physician. This helps the physician to 'reflect-in-action' by reviewing the patient's status relative to what was taught during the CME activity—i.e., the extent to which the approaches learned at the CME activity helped the physician diagnosis and/or treat specific patients.

Slotnick (1996) notes, "consideration of outcomes is important, because that is when the physician determines whether the problem precipitating her attendance at the CME activity was resolved. There is something validating about having these success messages communicated by an outside, impartial agent (CME instructor)—especially when the physician is first learning new approaches and techniques. This validation, and whatever discussion of it accompanies the review of the physician's action (i.e., further reflection-on-action), should also make more valued, more permanent, the insights the doctor realized through both the CME activity and applying what was learned. Evidence of successful resolution of patient care problems means that the physician's security needs are more likely satisfied because her learning of new ways to solve

patient care problems makes her professional life more predictable; that is, a class of patient problems can now be approached more confidently."

What attributes make CME activities most attractive? In a follow-up to a U.S. national study, Slotnick and colleagues (1995) identified how physicians decide which CME activities to attend. The goal of the follow-up was to determine the meanings doctors attach to factors they use in selecting CME activities. The researchers rank-ordered the following attributes making CME activities most attractive:

1. CME credit availability
2. CME topic
3. Social or family obligations
4. Speaker's reputation
5. Facilities and activities for families

Slotnick and colleagues summarized their findings in logistic regression equations predicting the likelihood of an activity's selection by study participants. They found that if a CME activity contained the following attributes, physicians were more likely to attend—CME credit availability, appropriate topic to assist physicians in addressing patient care problems, and the speaker's reputation. The research indicated physicians would put aside their social and family obligations, to attend a CME activity, where the instructor had a reputation of teaching doctors how to deal with specific patient care problems or which validate the approaches the physicians were already using to manage those patient care issues.

However, Slotnick and colleagues also learned that "doctors in rural areas were much more concerned about the difficulties they had to overcome in order to attend CME activities. Not only was finding qualified coverage for their practices more difficult and expensive than in large cities, but travel anywhere also meant either a long automobile ride or both car and plane travel. Although doctors in solo practice in cities reported similar difficulties in finding practice coverage, rural doctors seemed more bothered by the scope of arrangements they had to make."

Based on their research, Slotnick and colleagues suggest that CME should be conceptualized as a 'cost centre' in a medical practice competing for resources with other aspects of a doctor's professional and personal life. That is, although physicians receive three types of benefits from attending CME activities (collect CME credits, enjoy opportunities to gain insight/wisdom to address patient care problems, and address a range of their own psychological needs), they also incur specific costs to attain these benefits. Attendance at a CME activity translates into costs for the physician that include:

- Financial (the direct and indirect costs of attendance, loss of patient care revenue, and continued practice costs);
- Professional (not being available to see patients, and reliance on others for patient care coverage); and
- Personal (being away from home and family, and being unavailable to handle personal matters).

2.1.3 CONCLUSIONS: SELECTIVE REVIEW OF THE LITERATURE

A physician's decision to participate in CME activities transcends involves more than just wanting to stay up-to-date. It also involves a desire to learn how to solve specific patient issues facing physicians in their practices. This is best accomplished by designing CME activities to provide physicians with the opportunity to learn to solve problems of specific importance to them, and to validate the approaches they are currently using to address patient care issues. This requires CME instructors to set aside sufficient time to permit participating physicians to present 'case' information and to ask questions. CME instructors should also encourage and facilitate

discussion among participating physicians. Instructors should also provide ways to help physicians recall what was learned during the CME activity.

CME speakers/instructors should have a recognized reputation in the areas in which they teach. They should also have the appropriate knowledge and skills to present to participants new/different methods physicians can use to address specific patient issues.

It is important to acknowledge that physicians incur three types of financial costs when attending a CME activity: (1) the fee for the course; (2) the cost of travel; and (3) the cost associated with lost revenue because of time spent away from his/her clinic practice. Finding ways to minimize these costs will help attract participants.

2.2.1 INTRODUCTION: CME EXPERIENCE OF ALBERTA RURAL PHYSICIANS

In this section of the report we provide insights from our interviews with 57 rural physicians in Alberta—33 who have attended CME activities delivered through the University of Alberta, and 24 who have attended CME activities delivered through the University of Calgary. The mean length of time these individuals have been practicing medicine is 21 years—17.5% [10 of 57] have been practicing for less than 10 years, while 38.6% [22 of 57] have practiced for 10 to 20 years, and 43.9% [25 of 57] have practiced medicine for more than 20 years.

2.2.2 FINDINGS: CME EXPERIENCE OF ALBERTA RURAL PHYSICIANS

The data presented in Exhibit 1 indicate that 'reading journals', 'attending regional conferences', and 'going to seminars offered by the universities' are the most frequently cited ways rural physicians pursue Continuing Medical Education. The information also indicates that more than half of the 57 rural physicians interviewed 'rarely' or 'never' attend audio teleconferences, or use the Virtual Library maintained by U of C.

EXHIBIT 1

MOST FREQUENT WAYS FIFTY-SEVEN RURAL PHYSICIANS PURSUE CME

Types of CME Courses/Activities	Always	Most Often	Sometimes	Rarely	Never	NA	Total
Reading Medical Journals [% of Physicians]	24.6%	33.3%	35.1%	7.0%	0.0%	0.0%	100.0%
Number of Physicians	14	19	20	4	0	0	57
Regional Conferences Offered by a University, such as the U of A, or U of C [% of Physicians]	17.5%	22.8%	29.8%	15.8%	14.0%	0.0%	100.0%
Number of Physicians	10	13	17	9	8	0	57
Seminars Offered by a University, such as the U of A, or U of C [% of Physicians]	5.3%	29.8%	50.9%	8.8%	5.3%	0.0%	100.0%
Number of Physicians	3	17	29	5	3	0	57
Seminars Offered by an Organization Other Than a University [% of Physicians]	1.8%	22.8%	52.6%	17.5%	5.3%	0.0%	100.0%
Number of Physicians	1	13	30	10	3	0	57
Audio-teleconferences [% of Physicians]	8.8%	15.8%	17.5%	21.1%	36.8%	0.0%	100.0%
Number of Physicians	5	9	10	12	21	0	57
Conferences Offered by an Organization Other than a University [% of Physicians]	1.8%	17.5%	49.1%	22.8%	8.8%	0.0%	100.0%
Number of Physicians	1	10	28	13	5	0	57
MainPro-C courses Offered by a University, such as the U of A, or U of C [% of Physicians]	0.0%	14.0%	40.4%	14.0%	29.8%	1.8%	100.0%
Number of Physicians	0	8	23	8	17	1	57
Virtual Library Maintained Through the U of C [% of Physicians]	5.3%	7.0%	29.8%	21.1%	36.8%	0.0%	100.0%
Number of Physicians	3	4	17	12	21	0	57
Video conferencing (Telehealth) Offered by U of A, or U of C [% of Physicians]	1.8%	10.5%	14.0%	24.6%	35.1%	14.0%	100.0%
Number of Physicians	1	6	8	14	20	8	57
Postgraduate Lecture Series [% of Physicians]	0.0%	7.0%	12.3%	29.8%	42.1%	8.8%	100.0%
Number of Physicians	0	4	7	17	24	5	57
Other [% of Physicians]	7.0%	10.5%	15.8%	3.5%	63.2%	0.0%	100.0%
Number of Physicians	4	6	9	2	36	0	57

According to Exhibit 2, about one-third of the 57 physicians we interviewed attended less than five CME activities in the last two years—offered through either the University of Alberta or the University of Calgary. The mean number of CME activities attended was 9 courses.

EXHIBIT 2

NUMBER OF CME ACTIVITIES OFFERED BY
U OF A OR U OF C
ATTENDED BY RURAL PHYSICIANS IN THE LAST TWO YEARS

Number of CME Activities Offered by U of A or U of C Attended in the Last Two Years	Number of Physicians	Percent of Physicians
< 5 CME Activities	21	36.8%
5 to 10 CME Activities	23	40.4%
>10 CME Activities	13	22.8%
Total	57	100.0%

During our interviews, we asked physicians what motivated them to attend specific CME activities offered through the two universities. More than half of these individuals [34 of 57] attended the CME course because the topic was relevant, and another 26.3% [15 of 57] participated because the location was convenient (see Exhibit 3).

EXHIBIT 3

MOTIVATION FOR ATTENDING SPECIFIC CME ACTIVITIES
OFFERED THROUGH U OF A OR U OF C

Motivation for Attending the Specific CME Activities Offered by Either U of C or U of A	Number of Physicians	Percent of Physicians
Relevant Topic	34	59.6%
Convenient Location	15	26.3%
Other	8	14.0%
Total	57	100.0%

According to Exhibit 4, about half of the 57 physicians we interviewed attended less than five CME activities in the last two years—offered by organizations ***other than*** either the University of Alberta or the University of Calgary. The mean number of CME activities attended was 7 courses.

EXHIBIT 4

NUMBER OF CME ACTIVITIES OFFERED BY
ORGANIZATIONS OTHER THAN U OF A OR U OF C
ATTENDED BY RURAL PHYSICIANS IN THE LAST TWO YEARS

Number of CME Activities Offered by Organizations Other Than U of A or U of C Attended in the Last Two Years	**Number of Physicians**	**Percent of Physicians**
< 5 CME Activities	28	49.1%
5 to 10 CME Activities	23	40.4%
>10 CME Activities	6	10.5%
Total	57	100.0%

During our interviews, we asked physicians what motivated them to attend specific CME activities offered by organizations ***other than*** either the University of Alberta or the University of Calgary. More than half of these individuals [34 of 57] attended the CME course because the topic was relevant, and another 14.0% [8 of 57]participated because the location was convenient (see Exhibit 5). The data indicate that almost one-quarter of the 57 physicians [12 of 57] noted 'other' factors for attending CME activities offered by organizations other than the two universities—such as family programs, entertainment, high quality food, and the sponsor paid for all expenses.

EXHIBIT 5

MOTIVATION FOR ATTENDING SPECIFIC CME ACTIVITIES
OFFERED BY ORGANIZATIONS OTHER THAN U OF A OR U OF C

Motivation for Attending the Specific CME Activities Offered by Organizations Other Than U of C or U of A [e.g., pharmaceutical companies]	**Number of Physicians**	**Percent of Physicians**
Relevant Topic	34	59.6%
Convenient Location	8	14.0%
Exotic Location	3	5.3%
Other	12	21.1%
Total	57	100.0%

When these 57 rural physicians did attend CME activities, on average, they spent 2 days away from their clinic practice—this ranged between a 1/2-day to 5 days. Slightly more than half of the physicians indicated that when they were away at CME activities, there was either no impact or a modest impact on the other physicians in their clinic practice [22.8% and 29.8% respectively]. (see Exhibit 6). However, 10 of the 57 respondents [17.5%] noted there was a 'substantial impact' on their colleagues.

EXHIBIT 6

IMPACT ON OTHER PHYSICIANS IN THE CLINIC PRACTICE

Extent of the Impact on Other Physicians in Your Practice While You Were Attending the CME Activities	**Number of Physicians**	**Percent of Physicians**
Substantial impact	10	17.5%
Moderate impact	14	24.6%
Modest impact	17	29.8%
No Impact	13	22.8%
Not Applicable	3	5.3%
Total	57	100.0%

During our interviews, we asked the 57 rural physicians about the extent to which certain factors influenced their decision to attend CME activities. According to Exhibit 7, slightly more than one-quarter of the physicians [17 of 57] noted that 'time away from their clinic practice' was 'always' a factor in deciding whether to attend CME activities, while another 22.8% [13 of 57] respondents indicated this was 'most often' a factor in determining whether to participate in a CME course. About half of the 46 physicians stated that 'travel time to the course' was a factor [19.3%—'always', and [29.8% —'most often'] when deciding about attending a CME activity. The 'cost of the CME course' was a less important factor in the decision to participate in a CME activity.

EXHIBIT 7

FACTORS AFFECTING THE DECISION TO ATTEND A CME ACTIVITY

Factors in the Decision to Attend a CME Course/Activity	Always	Most Often	Sometimes	Rarely	Never	Total
Time Away from the Physician's Clinic Practice [% of Physicians]	29.8%	22.8%	21.8%	22.8%	3.5%	100.0%
Number of Physicians	17	13	12	13	2	57
Travel Time to the CME Activity [% of Physicians]	19.3%	29.8%	29.8%	12.3%	8.8%	100.0%
Number of Physicians	11	17	17	7	5	57
Cost of the CME Activity [% of Physicians]	8.8%	19.3%	38.6%	24.6%	8.8%	100.0%
Number of Physicians	5	11	22	14	5	57

2.2.3 CONCLUSIONS: CME EXPERIENCE OF ALBERTA RURAL PHYSICIANS

The rural physicians we interviewed have a keen interest in pursuing CME activities, particularly when the topics are relevant to patient care issues, and the courses are at a convenient location. However, when a physician decides to attend a CME activity, there is an impact on his/her colleagues, and the 'time away from the clinic practice' is a critical factor that enters into a physician's decision to participate in a CME course.

POINTS TO PONDER
AND
RECOMMENDATIONS

3.3.1 INTRODUCTION: POINTS TO PONDER ABOUT CME FOR RURAL PHYSICIANS

This section of the report presents some points to ponder respecting enhancing CME for rural physicians. We have drawn upon information from our interviews with 57 rural physicians, 12 instructors who deliver CME to Alberta rural physicians, 4 Regional Medical Directors, personnel from Alberta We*ll*net (Telehealth), and individuals from the U of A and U of C CME offices.

3.3.2 POINTS TO PONDER ABOUT CME FOR RURAL PHYSICIANS

A. Impact of CME on Retention and Recruitment of Rural Physicians

During our interviews with the 57 physicians and the 12 CME instructors, we asked if CME had an impact on recruiting and retaining rural physicians. Exhibit 8 indicates that almost 80% of the 57 physicians perceive that CME has some impact on retaining rural physicians. In fact, 40.4% of these individuals indicated CME has a 'substantial' impact on retaining rural physicians. U of A and U of C both arrange for the delivery of CME activities in rural locations, which assists rural physicians to increase their knowledge and skills without having to practice in an urban community. The CME instructors who responded to this question noted they hold a similar perspective.

However, most of the 57 physicians, and CME instructors believe CME has no impact or a modest effect on recruiting physicians to rural communities (see Exhibit 9).

EXHIBIT 8

IMPACT OF CME ON RETAINING RURAL PHYSICIANS

Impact of CME on Retaining Rural Physicians	Number of Physicians	Percent of Physicians
Substantial Impact	23	40.4%
Moderate Impact	10	17.5%
Minimal Impact	12	21.1%
No Impact	12	21.1%
Total	57	100.0%

EXHIBIT 9

IMPACT OF CME ON RECRUITING RURAL PHYSICIANS

Impact of CME on Recruiting Rural Physicians	Number of Physicians	Percent of Physicians
Substantial Impact	13	22.8%
Moderate Impact	6	10.5%
Minimal Impact	17	29.8%
No Impact	18	31.6%
Don't Know	3	5.3%
Total	57	100.0%

B. Increase/Decrease in the Use of Specific Methods to Deliver CME to Rural Physicians

Since CME is valued by the 57 physicians we interviewed, and the majority stated they were motivated to attend specific CME activities because the topic was 'relevant' and the course was offered in a 'convenient location', it is imperative that U of C and U of A consider these factor when planning CME activities/courses in the future. For example, the information presented in Exhibit 10 indicates the 57 rural physicians would prefer an increase in the number of 'regional conferences', 'MainPro-C courses', and seminars.

EXHIBIT 10

CHANGES IN THE METHOD OF DELIVERY OF CME TO RURAL PHYSICIANS

Changes in the Method of Delivery of CME to Rural Physicians	More CME Courses or Activities	Fewer CME Courses or Activities	Same Number of CME Courses or Activities	Don't Know	Total
Regional Conferences [% of Physicians]	66.7%	10.5%	15.8%	7.0%	100.0%
Number of Physicians	38	6	9	4	57
MainPro-C courses Offered by a University, such as the U of A, or U of C [% of Physicians]	52.6%	5.3%	12.3%	29.8%	100.0%
Number of Physicians	30	3	7	17	57
Seminars [% of Physicians]	52.6%	21.1%	15.8%	10.5%	100.0%
Number of Physicians	30	12	9	6	57

Video conferencing (Telehealth) [% of Physicians]	49.1%	12.3%	14.0%	24.6%	100.0%
Number of Physicians	28	7	8	14	57
Audio-teleconferences [% of Physicians]	31.6%	31.6%	22.8%	14.0%	100.0%
Number of Physicians	18	18	13	8	57
Postgraduate Lecture Series [% of Physicians]	21.1%	33.3%	7.0%	38.6%	100.0%
Number of Physicians	12	19	4	22	57

During our interviews with CME instructors, we asked them to rate the effectiveness of different methods of delivery. The data presented in Exhibit 11 indicates there is a high degree of congruence between the type of CME activities, which the instructors find effective, and those, which are of interest to the 57 rural physicians whom we interviewed. For example, 9 of 11 [81.8%] instructors who deliver Regional Conferences stated this is an effective method of providing CME to rural physicians. Concomitantly, 66.7% of the rural physicians we interviewed [38 of 57] indicated the U of A and/or U of C should deliver more Regional Conferences.

EXHIBIT 11

NUMBER OF INSTRUCTORS WHO DELIVER EACH TYPE OF CME AND WHO FIND IT EFFECTIVE

Type of CME	**Number of Instructors Who Deliver Each Type of CME and Find It Effective**	**Percent**
Regional Conferences Offered by U of A or U of C	9 of 11	81.8%
MainPro-C courses Offered by U of A or U of C	6 of 6	100.0%
Seminars Offered by U of A or U of C	5 of 7	71.4%
Postgraduate Lecture Series Offered by U of A or U of C	4 of 4	100.0%
Conferences Offered by an Organization Other than a University	2 of 8	25.0%
Audio-teleconferences Offered by U of A or U of C	2 of 6	33.3%
Video conferencing (Telehealth) Offered by U of A or U of C	1 of 5	20.0%

According to Exhibit 12, almost two-thirds of the 57 physicians [64.9%—37 of 57] noted it was 'important' for the U or C or the U of A to use the Internet to deliver CME courses/activities [16 stated 'very important' and 21 stated 'somewhat important']. More than three-quarters of the 57 physicians stated they would participate if either of the two universities used the Internet to deliver CME courses/activities [44 of 57]. However, one of the four Regional Medical Officers we interviewed stated that while physicians may 'think' they will access CME courses through the Internet because the information is available anytime, this 'ease of access' will result in physicians not designating any specific time for this activity.

EXHIBIT 12

IMPORTANCE OF USING THE INTERNET TO DELIVER CME COURSES

Importance of Using the Internet to Deliver CME Courses/Activities	Number of Physicians	Percent of Physicians
Very Important	16	28.1%
Somewhat Important	21	36.8%
Neither Important Nor Unimportant	0	0.0%
Somewhat Unimportant	10	17.5%
Not Important At All	10	17.5%
Total	57	100.0%

Both the U of C and the U of A are developing plans to expand the use of video-conferencing/telehealth to deliver CME courses. Less than half of the 57 physicians we interviewed stated they have participated in at least one video conference [24 of 57—42.1%]. On average, these 24 individuals attended 2 video conferences. They provided the following suggested improvements:

- physicians should receive, in advance, copies of the slides used by the presenter, as well as a syllabus of the presentation in order to allow the physician to participate in the discussion rather than having his/her attention diverted by the necessity to take notes;
- the presenter should provide practical suggestions capable of implementation in rural communities
- to encourage greater discussion, there should be a 'panel of experts' rather than a sole presenter
- physical space requires improvement;
- the presenter requires knowledge and experience with video conferencing equipment;
- technicians should be present during the entire video conference;

According to Exhibit 13, 75.4%% of the 57 physicians [43 of 57] indicated physicians in their RHA would be receptive to participating in CME activities using video conference/telehealth technology.

EXHIBIT 13

RECEPTIVITY OF PHYSICIANS IN THE RESPONDENT'S RHA
TO PARTICIPATING IN CME ACTIVITIES USING VIDEO CONFERENCE/TELEHEALTH TECHNOLOGY

Receptivity of The Physician's Colleagues in Participating in CME Activities Using Video Conference/Telehealth Technology	**Number of Physicians**	**Percent of Physicians**
Very Receptive	15	26.3%
Somewhat Receptive	28	49.1%
Neither Receptive Nor Unreceptive	1	1.8%
Somewhat Unreceptive	5	8.8%
Not Receptive At All	0	0.0%
Don't Know	8	14.0%
Total	57	100.0%

In addition to the issues raised by 24 of the 57 rural physicians who had participated in video conferencing, we also obtained information from Alberta We*ll*net about ways to increase the effectiveness of this technology. Alberta We*ll*net is conducting a study entitled Current Status and Future Growth of Telehealth. Although the study has not been completed, the author indicated there are three major drivers and three primary barriers to the growth of telehealth/telemedicine as a vehicle for delivering Continuing Medical Education.

The following three factors are driving the ***growth*** of telehealth: (1) accessibility; (2) cost; and (3) time. ***Accessibility*** involves several issues, including:

- increasing competency for physicians;
- the ability to link education with patient-care and patient-management issues;
- reducing urban and rural isolationism;
- providing timely information to Regional Health Authorities to coincide with the budgeting cycle;
- assisting with recruitment and retention of rural physicians;
- reducing duplication; and
- increasing attendance at one-time for the same CME activity.

Cost and time involve several issues, including:

- reducing costs of travel;
- reducing time away from the clinic practice, thereby reducing lost income;
- reducing the time away from home and family; and
- reducing the costs associated with the delivery of CME courses.

The following three factors are ***barriers*** to the acceptance of telehealth: (1) communication; (2) technology/telecommunications system; and (3) people who provide system support. ***Communication*** involves several issues, including:

- lack of awareness of telehealth;
- no central listing of telehealth activities and how to access these courses;
- the lack of ability and/or willingness of current instructors to adapt their presentation styles to the interactive learning environment created through telehealth; and
- the lack of attention to finding instructors whose presentation styles are congruent with the interactive learning environment created through telehealth.

Technology/telecommunications system is a significant barrier to the acceptance of telehealth as an effective method of delivering CME. The current telecommunications system in Alberta is somewhat fragmented. Accordingly, there are parts of the province that can accept the telehealth transmissions slower than others. Consequently, all of the sites involved in a telehealth session receive the transmitted signals at the slower rate. This results in information being delayed between sender and receiver. The time delay is often as long as 3 seconds—making it difficult for people to follow the presentation. In addition, this 3 second delay causes the presenter to believe there are no questions from the audience and, therefore, he/she continues the presentation. When this occurs, participants' questions are left unanswered because they are reluctant to interrupt the presenter.

Having sufficient and appropriate human resources to provide telehealth system support is a significant barrier to the acceptance of telehealth as an effective method of delivering CME. Currently, many of the individuals selected by their RHAs to provide telehealth system support have other job responsibilities. These other job responsibilities can interfere with providing system support for a specific telehealth event. Moreover, there are labour relations issues, which also interfere with providing system, support for a specific telehealth event—particularly if the telehealth activity occurs in the evening or on the week-end.

C. Maintain Two RPAP-funded CME Programs for Rural Physicians

The University of Calgary and the University of Alberta each receive a grant from the Rural Physician Action Plan for the purpose of delivering appropriate CME courses/activities to rural physicians. Each university uses the RPAP grant to enhance its CME infrastructure. The monies are used for human resources as well as computer hardware and software.

Using the RPAP funding, the University of Calgary—Office of CME and Professional Development, has developed a Rural Education Unit composed of a Rural Education Coordinator and a secretary. The responsibilities of this Unit include course design, course administration and evaluation, as well as committee management. In addition, the U of C uses some of the monies from RPAP to fund .25 FTE related to computer programming.

The University of Alberta—Office of CME, uses the RPAP monies to fund specific portions of various FTEs in three specific areas: (1) Distance Learning Programs—Regional Conferences, Teleconferences, and Palliative Care; (2) Technology Based Learning—Problem-Based Learning, Computer Skills Courses; and (3) Video conference or telehealth.

Without RPAP funding, the universities would have insufficient resources to retain existing personnel who are responsible for designing CME activities. This would have a negative impact on the ability of the universities to deliver appropriate CME activities to physicians in Alberta—including rural physicians.

During our interviews with 4 Regional Medical Directors, from rural RHA, only two of these individuals indicated that the Regional Health Authority does work with U of A and U of C to identify CME course/needs. The other two Regional Medical Directors stated they identify CME instructors, independently of the two universities, to deliver courses designed to meet local needs. This ensures courses meet the needs of local physicians to increase their skills, knowledge and confidence. It also increases the social support of local physicians. ***It is imperative that U of C and U of A develop an appropriate mechanism to identify the CME needs of rural physicians. Continued RPAP funding to the universities will help ensure these institutions are responsive to the needs of rural physicians***.

D. Reimbursing Instructors Who Deliver CME to Rural Physicians

Both the University of Calgary and the University of Alberta are experiencing difficulty in recruiting instructors to deliver CME to rural physicians—particularly because neither institution pays instructors an honorarium recognizing their contribution. The two universities continue to rely on the same instructors each year. Both universities have indicated that these individuals are expressing some reluctance to continue to deliver CME to rural physicians without any remuneration for their time.

All of the 12 instructors we interviewed noted they do not receive any reimbursement for delivering CME to rural physicians. Only 3 of these individuals stated this was a concern to them, and the remaining 9 physicians stated they considered this to be either part of their job or their contribution to the university.

The 12 instructors we interviewed during the evaluation noted they enjoy developing an ongoing working relationship with rural physicians. These individuals stated they learn as much from the participants as the rural physicians learn from them. The two universities could 'market' these attributes when attempting to expand their list of instructors.

If the universities continually approach the same physicians to deliver CME courses to rural physicians, it is likely that some of these individuals will eventually request compensation for their time. ***Accordingly, it is imperative that the universities increase their cadre of instructors***. However, the pharmaceutical companies often recruit the same instructors as the universities—but pay these individuals for the time they are delivering CME. This competition for instructors is another factor, which hampers the ability of the University of Calgary and the University of Alberta to recruit individuals to deliver CME to rural physicians.

3.3.4 RECOMMENDATIONS RESPECTING THE CME PROGRAMS FOR RURAL PHYSICIANS

There is a need for change in some aspects of the CME Programs for Rural Physicians. Therefore, the intent of the following recommendations is to provide guidance to facilitate the effective and efficient delivery of CME to rural physicians. The recommendations have ***not been prioritized***.

RECOMMENDATION #1:

It is recommended that CME speakers/instructors should have a recognized reputation in the areas in which they teach. They should also have the appropriate knowledge and skills to present to participants new/different methods physicians can use to address specific patient issues.

Explanatory Note:

To facilitate effective and meaningful dialogue between the instructors and rural physicians attending a CME course/activity, it is critical that instructors have knowledge of the practice of rural medicine in Alberta.

RECOMMENDATION #2:

It is recommended that RPAP work with the University of Alberta and the University of Calgary, as well as other stakeholders—such as the AMA—to find ways to minimize the financial costs incurred by physicians when attending a CME activity:

Explanatory Note:

Physicians incur three types of financial costs when attending a CME activity: (1) the fee for the course; (2) the cost of travel; and (3) the cost associated with lost revenue because of time spent away from his/her clinic practice.

RECOMMENDATION #3:

It is recommended that the University of Calgary and the University of Alberta strive to deliver CME activities, which provide significant insights about patient-care issues confronting rural physicians.

RECOMMENDATION #4:

It is recommended that the University of Calgary and the University of Alberta strive to deliver CME activities in locations, which are easily accessible to a large number of rural physicians at any one time.

RECOMMENDATION #5:

It is recommended that the University of Alberta and the University of Calgary consider increasing the number of Regional Conferences, Seminars, and MainPro-C courses offered to rural physicians.

RECOMMENDATION #6:

It is recommended that the RPAP take a leadership role in facilitating coordination between the University of Alberta and the University of Calgary in meeting the currently identified CME needs of rural physicians, including harnessing new technology—such as the internet

and telehealth—in delivering CME to physicians located in rural communities.

RECOMMENDATION #7:

It is recommended that the RPAP establish a Task Group composed of the College of Physicians and Surgeons of Alberta, the University of Calgary and the University of Alberta, Regional Health Authorities (through the Council of Medical Directors), the AMA (Section of Rural Medicine), and representatives of the pharmaceutical industry to discuss ways of meeting the currently identified CME needs of rural physicians.

Explanatory Note:

During its explorations, the Task Group may identify circumstances where it is advantageous for the organizations to pool their resources to address some of the identified CME needs of rural physicians.

The mandate of the Task Group should also include identifying topics of interest to rural physicians in Alberta, for instance: (a) the appropriate use of specific types of pharmaceutical such as antibiotics and antihypertensives; and (b) strategies of disease-management for specific types of chronic diseases including diabetes and asthma.

The Task Group should also examine emerging needs in CME for rural physicians based on national and provincial trends.

Since the College of Physicians and Surgeons of Alberta has a vested interest in ensuring physicians strive to increase their knowledge of new/different methods of meeting the needs of their patients, it is a key participant on the Task Group.

RECOMMENDATION #8:

It is recommended that the RPAP continue to fund the CME Programs for Rural Physicians at both the University of Calgary and the University of Alberta.

RECOMMENDATION #9:

It is recommended that the RPAP work with both the University of Calgary and the University of Alberta to develop strategies for recruiting a sufficient cadre of instructors to deliver CME to rural physicians. This may involve providing an honorarium to individuals for delivering CME to rural physicians.

Explanatory Note:

Both the University of Calgary and the University of Alberta are experiencing difficulty in recruiting instructors to deliver CME to rural physicians—particularly because neither institution pays instructors an honorarium recognizing their contribution. The two universities continue to rely on the same instructors each year. These individuals are reluctant to continue to deliver CME to rural physicians without any remuneration for their time.

In addition, the pharmaceutical companies often recruit the same instructors as the universities—but pay these individuals for the time they are delivering CME. This competition for instructors is another factor, which hampers the ability of the University of Calgary and the University of Alberta to recruit individuals to deliver CME to rural physicians.