MEDICAL STUDENT TRAINING SYMPOSIUM

Summary Report December 2007

GPRC

PREDA
PEACE REGION ECONOMIC DEVELOPMENT ALLIANCE

Northern Alberta Development Council

Peace Country Health

Chamber of Commerce
Grande Prairie & District 1913

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A) Overall Context and Introduction

In the fall of 2006, a joint working committee of the Boards of Governors of Peace Country Health and Grande Prairie Regional College was established to plan and collaborate to meet the educational needs of Peace Country Health particularly in the health care professions. A subcommittee of this broader committee was established in the spring of 2007 to investigate and engage in action plans (as needed) to address the shortage of physicians in the region served by Peace Country Health. Actions of the committee included:

- meetings with local physicians
- meetings with representatives from various universities
- the development of a report on the magnitude of the shortage of physicians

The recommendations of the report detailing the magnitude of the problem regarding physician shortage included:

- A working group be established to examine options, costs, timing, etc. for a Medical Degree, offered by an existing University, to address the needs of Northern Alberta.
- The feasibility be explored of a Northern Alberta medical training program – a partnership between Peace Country Health, Grande Prairie Regional College, and an existing University with a mandate to offer undergraduate medical degrees.
- A partnership be created by the community to work together in support of a Medical Degree offered by an existing University.
- Grande Prairie Regional College offering an undergraduate science degree (as a GPRC degree or in collaboration with an existing University) to increase student access to further medical training either as medical doctors or in allied professions.

In follow up, a one-day Medical Student Training Symposium was held to gather input from stakeholders and to develop principles to guide the development of further actions surrounding physician training for Northern Alberta. The symposium was co-sponsored by five member organizations as follows:

- Peace Country Health (PCH)
- Grande Prairie and District Chamber of Commerce
- Northern Alberta Development Council (NADC)
- Peace Region Economic Development Alliance (PREDA)
- Grande Prairie Regional College (GPRC)

The symposium was attended by over 100 individuals representing stakeholders drawn from the business, medical, educational, Aboriginal, and governmental sectors.

Marvin Moore, Board of Governors Chair for Peace Country Health welcomed symposium guests and participants and introduced the need for Northern medical training to meet the demands of the region.

Elder Michael David opened the symposium with a prayer and good wishes for positive outcomes of the day and of the initiative.

Dr. Roger Strasser provided some food for thought at the outset of the day's discussions. He outlined the history of the collaborative development of the Northern Ontario School of Medicine. Drawing from research, he noted that there are three factors that most strongly affect whether a doctor settles in a rural area:

- rural upbringing
- positive clinical and educational experiences in MD program
- residency programs that prepare physicians for rural and remote settings

He noted that opportunities for involvement in academic and research work also function as a good recruitment and retention strategy for doctors. Those with a passion for living and working in the North are team players and demonstrate sensitivity to diversity will help make a rural education program a success.

B) Summary of Demand

Sean Chilton of Peace Country Health presented a summary of the demand for medical training in Northwestern Alberta. His report spoke to a number of factors related to the demand for physicians in the North. Among the highlights were:

- The average number of family physicians per 100,000 population in Alberta is estimated at 74. Peace Country Health region currently has 54 family physicians per 100,000 population. This is approximately 2/3 of the Alberta average and this region requires 26 additional FTEs just to reach the Alberta average. The Northern Lights Health Region has 25 family physicians per 100,000 population and therefore requires 54 additional FTEs to reach provincial averages.
- Given population growth and expected retirements, Peace Country Health will need to recruit at least 120 family physicians between now and 2025 (using a 15% turnover rate every 5 years, the number needed to recruit increases to 270). The Northern Lights Health Region will require similar growth.
- The specialist need in Peace Country Health is currently 21 and expected to increase by another 26 by 2025.

Recruitment efforts of Peace Country Health are decreasingly successful. This is due to:

- An inadequate supply of graduates trained in Alberta and Canada.
- Graduates being unwilling to undertake a rural practice.
- Insufficient supply and competition for medical doctors trained elsewhere.
- High costs of recruitment and retention.

C) Panel Presentation on Different Models of Medical Education

The stage for this component of the day was set by Dr. Richard Martin, an area physician, who gave his personal reflections on the **skills and knowledge required of doctors practicing in northern communities**, and the implications for education and training of medical students. He noted the challenge of finding doctors to be preceptors, as well as their importance in providing a positive experience for medical students.

David Kay, Executive Director of the Rural Physician Action Plan highlighted different approaches to **distributed medical education**, i.e. where students and teachers are outside the classroom or main clinical site. He noted however that equally important to location and method are *what curriculum is taught* and *by whom*. Alberta employs some aspects of distributed education in its current programs, through summer externships, rural clerkship rotations, the Rural Family Medicine Network and ongoing medical education for practicing physicians.

The **Northern Ontario School of Medicine**, which opened in 2003, is a collaborative effort of the Faculties of Medicine at Lakehead and Laurentian Universities. The main campuses are in Thunder Bay and Sudbury, plus multiple teaching and research sites in large and small communities across Northern Ontario, with human and instructional resources widely distributed across the communities. The program focuses on the cultural diversity and unique health care needs of the region.

Dr. Roger Strasser, founding Dean, outlined the six academic principles upon which the program is based: interprofessional collaboration, integration, community oriented, distributed community engaged learning, generalism, and diversity. The School's admissions criteria include student background in northern communities. The program incorporates students into health care teams and provides for maximum hands-on experience, which, Dr. Strasser noted, leads to greater procedural competence and better knowledge of the more common conditions.

The **Northern Medical Program at the University of Northern British Columbia** is also based on a partnership, between UBC's existing medical school and the delivering universities in other locations in the province. Working with an existing program helped start up (in 2004) to proceed much more quickly. Dr. Snadden, Dean of the UNBC's Northern Medical Program, pointed out that the program receives excellent support and resources from UBC and uses technology heavily to provide the needed programming. Effort was needed to revise the curriculum to reflect northern and rural needs.

Dr. David Snadden noted that they are responsible for seven of the eight semesters of programming and that additional admissions processes help select students interested in living in the North. Community support is an integral part of the program and student complete clerkships in communities across the north. Having been established in 2004, the first group of graduates will soon be heading into their residency period.

Alberta's Rural Integrated Community Clerkship (RICC) is a new initiative being piloted by the Universities of Alberta and Calgary. It is a nine month rural clerkship option for 3rd year medical students interested in learning medicine in the generalist setting offered by a family practice in rural communities. Dr. Jill Konkin and Dr. Doug Myhre, rural deans from the respective universities, noted that this will build communities of learners and of preceptors in rural communities. Students in these settings will learn the core specialties in an integrated fashion by following their patients from the clinic to specialty consults, surgery, and delivery. (Initiatives underway and being planned by the Universities to help increase training capacity for medical students)

Drs. Konkin and Myhre also highlighted a few other initiatives. Grande Prairie is a Rural Alberta North site and part of the Rural Alberta Family Medicine Network; it accommodates six students in the Grande Prairie location and could be increased. The universities are also exploring ways to offer first and second years students more rural learning opportunities, and to develop an academic rural stream to allow rural doctors to become involved in teaching. They noted two other concepts underdevelopment: an internal medicine master clinician program that may lead to an internal medicine residency option in Grande Prairie and mentorship programs to further develop surgeons in regional sites, support international medical graduates and rural regional teachers.

D) Group discussions

Symposium participants shared their thoughts in breakout discussion groups and summaries were presented to the whole. The following is based on the flipcharts generated through the discussion groups.

The Level of Need

Groups were asked to reflect on the projections contained in the agenda package and on the presentation by Sean Chilton regarding the level of need for Physicians in the North. All groups were in agreement that the level of need was significant and, if anything, understated by the report and presentation. Particular note was made by several groups that projecting to provincial averages as the baseline for need was inadequate for rural settings given, in particular, such considerations as:

- Rural and remote practices requiring significant travel across distances and therefore increasing the number of doctors required
- Lifestyle and occupational risks in the rural settings which likely increase the severity of medical conditions (and consequently the number of doctors required)
- The effect of case load and complexity on the `burnout` of doctors
- Shortages in allied professions (nursing, paramedics) and specialists increasing demand on doctors for services which may be able to be performed by others in more densely populated areas
- The effect of an increasing physician expectation for quality of life leading to reduced willingness to work or be on call `24 by 7`

Moreover, groups made comments that while the level of physician need may well have been captured for Peace Country Health, given the above considerations, the data presented did not document need or demand in other Northern health regions nor in the Yukon, Northwest Territories, and Nunavut. Similarly, note was made that there is a serious shortage not only of physicians, but of all health care professions in the North. This shortage may be more significant than reported particularly given the `shadow` population and the unique conditions of the North which do not permit easy comparisons to urban areas.

In sum, there was consensus across all groups that there is a significant need for physicians in the North that is not being met by current training and recruitment.

Barriers to Training Physicians to Work in the North

Groups were asked to reflect on what they saw as the dominant barriers to training physicians to work in the North. In general, groups noted that without an embedded system for training medical graduates to work in the North which is also located in the North, the so-called 70-70

rule was likely to continue to apply. This is generally interpreted to mean that 70% of graduates stay within 70 miles of their university upon graduation. More generally, without Northern education, it is therefore unlikely that many graduates from the Southern universities will choose to practice medicine in the North. Put somewhat differently, the dominant barriers to training physicians can be seen as existing on both the demand side and on the supply side.

Dealing first with demand related themes, these largely relate to incentives **or barriers to physicians practicing in the North.** Supply related themes centre primarily on the **availability of adequate training facilities and capacity in the North.** Concentrating on supply themes presumes that the existence of teaching capacity in the North will result in physicians being trained in the North and, consequently, staying in the North. Concentrating on demand themes presumes that the North must be a sufficiently welcoming and rewarding location for practice that physicians, wherever trained, will choose the North as their location of practice. Given that, for Canadian and, to some degree, internationally trained physicians, it is a seller's market, and that people with little or no exposure to the North have no way of recognizing whatever advantages may exist in the North, supply and demand obviously interact.

Demand related themes as outlined by symposium participants can be categorized as primarily related to, first, the presumed **quality of life** in the North that may attract or deter individuals from seeking to practice in the North and, second, to more specific **professional considerations** directly related to the practice of medicine itself.

Quality of life considerations include the following:

- Availability of community social, cultural, recreational, educational and other opportunities for physicians and their families
- Support and welcoming environment for spouse and life partners
- Perception of Northern isolation
- Culture `shock` - rural and remote versus urban and cosmopolitan
- Availability of housing

Professional considerations relate to the following major elements:

- Higher income for specialization versus `Family Practice` medicine requirements in the North
- Inability to specialize given demand for generalists
- Infrastructure of hospitals and care facilities limiting both specialization and range of practice
- Availability of consulting peers

Supply related themes deal with the availability of medical graduates to practice in the North. Here, the general shortage of Canadian, and, more specifically, Alberta medical graduates is seemingly taken as a given. The generalized physician shortage across Canada, the inability of the Alberta universities to meet demand for physicians in Alberta, the fact that the number of qualified applicants to positions in Alberta medical schools is approximately 10:1 are background considerations given the data presented at the symposium and the responses to question 1 (above). Here, the two themes of **University Regulations and admissions** and the **availability of training facilities and personnel in the North** emerged.

University regulations and admissions concerns were with the aggregate number of medical training spaces in the two Alberta universities offering medical training. Obviously, given the inability of the universities to train a sufficient number of physicians, a general expansion of the number of spaces was called for. However, given a sense that Northern Alberta was, in particular, disadvantaged by urban Southern institutions offering exclusive training in Alberta, the theme of university regulations and admissions as a supply related problem included the following dimensions:

- Too few (if any) seats allocated to rural and remote applicants
- No training in the North
- Need to teach in the North to expect graduates to stay in the North
- Need to value rural and remote generalist education as opposed to urban and `research intensive` specialist education

Beyond the university regulations and admissions, there was an understanding that there were significant **infrastructure and training considerations** that constrained medical education in the North. These included:

- Availability of qualified persons to teach in the North
- Availability of suitable teaching facilities in the North
- Adequate number of qualified preceptors and placements for interns
- Strong secondary and local post-secondary streams that prepared students for medical education

In sum, in answer to the question of barriers to the training of physicians to work in the North, the barriers identified included both incentives and the willingness of physicians to actually work in the North **and** the incentives, infrastructure, and willingness of the Alberta medical training schools to train physicians for practice in the North.

Medical Education Models

Groups at the symposium were asked to brainstorm advantages and disadvantages of models presented and to report back to the whole which components would best meet the needs of the

North. Briefly, the models presented, were the **Rural Integrated Community Clerkship** model of the U of A and U of C, the **UNBC affiliated model (**with UBC), and the **Northern Ontario Medical School**. Distributed learning options were also presented in the context of this session. Dealing first with advantages and disadvantages, and second, with preferred outcomes, this section details the dominant themes that emerged from that discussion.

The **Rural Integrated Community Clerkship** model (RICC) presently being piloted by the University of Alberta and the University of Calgary places a number of third year medical students in rural communities for a nine-month clerkship.

The chief advantages of the RICC were seen to be:

- It is already in place, therefore do-able in the short run
- Students are exposed to and become part of rural communities early
- There is an opportunity for community engagement
- It may result in more Northern physicians if those placed in the North return to the North
- It can help with local physician workload
- It has support from the university and is good for the U of A and U of C

The chief disadvantages seemed to emerge as:

- It does not result in an increase in student seats
- Limited in the number of students in the program and unlikely to meet the North's needs
- No guarantee that RICC graduates will return to the North following their residency
- Does not give ownership or increased resources to the community

The **UNBC Affiliated** model wherein UNBC in collaboration with UBC makes medical training available in Northern British Columbia was seen, in general, to have the following advantages:

- It gave some ownership to Northern BC
- A number of graduates were guaranteed for the program (it expanded capacity)
- There is some localized and generalist content driven by Northern needs
- Focuses on generalist education
- Students stayed closer to their home communities
- Reliance on the expertise of an established medical school (UBC)

Some disadvantages of the UNBC model were identified as:

- Start-up costs

- Finding qualified faculty and placements
- Its reliance on the availability of an undergraduate Science degree locally
- The program control being remote (UBC)

The **Northern Ontario Medical School** model, in general, has medical training delivered across two partner institutions in Northern Ontario. The strengths of this model were reported to be:

- Commitment to the North
- Community engagement
- Generalist training
- Flexibility in meeting unique Northern needs

Disadvantages included:

- Start-up costs
- Recruitment of instructors and placements

Groups were also asked to report on components of the models which they saw as important in meeting the needs of the North. Dominant components were:

- Sensitivity to Northern needs (generalist, diversity of population, etc.)
- A significant component of residency and training necessary in the North
- Preferably located in the North
- Utilizes an existing medical school mandate (i.e. is not a `new' medical school but uses existing accreditation)
- Community participation and physician `buy-in`
- Northern admission preference

These components were further elaborated on in the identification of principles.

Principles

Groups were asked, given the discussion above, to identify principles that should govern the development and delivery of medical training to serve Northern needs. While there was some variation across groups, strong themes emerged across groups that spoke to the development of **undergraduate medical training and residency programs (the Programs) that would meet the unique needs of the North.**

The first three principles speak to how the program should be developed. The Programs should:

1. **be provided in the North for the North. All aspects of the programs that can be taught in the North should be and technology should be used to aid accessibility.**
2. **be collaborative with an existing accredited university (ies) and build on the post-secondary infrastructure in the North.**
3. **ensure continued and broad stakeholder involvement in development and delivery.**

The remainder of the principles focus on program content and operation. The Programs should:

4. **be of the highest quality and be seen as an education option of choice.**
5. **should train generalists for the North in all areas of practice, including (but not limited to) family practice, internal medicine, surgery and psychiatry.**
6. **ensure the development of local faculty who can participate as integral members of the teaching team.**
7. **be holistic, interdisciplinary, focussed on community health, and be relevant to Aboriginal and other communities and peoples in the North.**
8. **include admission requirements that favour Northern residents or those with an affinity for northern and rural practice. The Programs should offer incentives for those who choose to work in the North upon completion of studies.**
9. **be offered in collaboration with local medical professionals, communities, the health regions, government and other stakeholders.**
10. **integrate learning and living for students and their families by welcoming them as important additions and participants to local community life, culture and recreation.**
11. **be financially sustainable with adequate resources for staff, capital equipment, and facilities.**
12. **be continually evaluated to ensure they are of high quality and able to meet the needs of the North.**

Dr. David Snadden wrapped up the discussions with some key advice to the group:

> "What's important right now for you is: what will the model look like and who is going to make it happen? The right one for you is the right one for northern Alberta…… What you create and what you own will be most important."

E) Statements from regional stakeholders

Representatives from stakeholder groups were given the opportunity to comment. They all chose to stress the importance of medical education and their commitment to work towards a solution.

Tab Pollock, Chair of the Grande Prairie & District Chamber of Commerce noted that a survey of members identified medical education and doctor retention as one of their top concerns. The Chamber has committed to 'being an active partner in the collaborative solution that addresses the shortage of medical personnel in our northwestern region. We look forward to participating in the next steps as we embark on identifying a medical education model best suited to our needs here in the north.'

Fletcher Bootle, Chair of Grande Prairie Regional College stated that the College is pleased to support to work with Peace Country Health and to help in whatever way possible to alleviate the shortage of medical professionals.

Dan Wong, speaking on behalf of the Mayor of the City of Grande Prairie, supported the establishment of medical program by building on existing programs to address the severe shortage of physicians.

Dr. Guy Harmer, Dean, Academics & Career Programs at Keyano College, spoke about the need to work collaboratively with North-eastern Alberta to develop a solution.

Andre Harpe, Board Member for Peace Country Health, thanked the universities for the support they showed by participating in this event and stressed the urgency of the need in the region.

Dave Kirschner, Northern Alberta Development Council member from Fort McMurray encouraged the group to continue to build through collaborative efforts, and stressed the interest of industry in preventative actions in health care. He suggested the group "work on the long term vision and take small steps to realize goals."

Ray Skrepnek, Chair of the Peace Regional Economic Development Alliance committed his organization to participate in the next phase of moving the ideas forward by helping to develop a business case, further strategies and specific initiatives.

F) Conclusion

Marvin Moore, Chair of Peace Country Health, outlined, at the close of the day, the situation as he saw it: "The 'real tragedy' is that while there may be enough or close to an adequate number of physicians in Alberta's metropolitan regions, rural and northern regions are experiencing a significant shortage. In particular, in the Capital Health Region, there are 1.2 physicians per 1000 compared to .64 physicians per 1000 in Peace Country Health's region." He pointed out that this disparity **will not change unless we change the system of medical training in Alberta.** Indeed, over the past four years, 26 International Medical Graduates came to PCH but, while we appreciate the efforts by the U of A and U of C regarding the training and practice of rural medicine through the RICC, and the Rural Physicians Action Plan, in the last four years, from the U of A and U of C, the number of graduates who came to Peace Country Health to practice family medicine was only two. This compares to projected need over the next ten years of 190 family practitioners within Peace Country Health. "If we look at results, the current system of training in Alberta has failed us." This is why, he noted, PCH, GPRC, NADC, PREDA, and the Grande Prairie Chamber of Commerce are so concerned about the future.

Marvin Moore continued to outline next steps as he saw them. These steps included:

- A report of this symposium is being prepared
- The report will be used to help enlarge the steering committee
- Buy-in from the Provincial and Federal governments is needed
    - Support from MLAs is anticipated
- There is a need to develop a sound business case for educating medical practitioners in Northern Alberta
- We may need to hire an experienced consultant who has been involved in the Northern Ontario or Northern BC projects so we don't make too many mistakes.

He then concluded with his thanks to Peace Country Health staff and doctors, participants and other partners.

G) Action steps

Based on the outcome of the discussions at the symposium, the symposium Steering Committee will:

- Recommend to the Boards of Peace Country Health and Grande Prairie Regional College that an ongoing medical education committee be established:
    - to develop a program as outlined in the Principles,
    - consisting of post-secondary representatives and stakeholders as outlined in the Principles.
- Send summary information to all symposium participants and other stakeholders.