The Need for Medical Training in North-Western Alberta:

A Community Discussion Paper

June 22, 2007

The Need for Medical Training in North-Western Alberta: A Community Discussion Paper[1]

Summary:

This brief report outlines the demand for family practitioners in North-Western Alberta and, in particular, in the region served by Peace Country Health. Data from the Northern Lights Health Region has also been incorporated in various locations indicating that the problem is not unique to one region but is, rather, systemic. The report therefore addresses the major barriers to the recruitment of medical doctors in rural, Northern and remote regions and offers a potential strategy to address the gap. The principal findings are:

- The average number of family physicians per 100,000 population in Alberta is estimated at 103. Even at average (Alberta-wide) numbers, the Alberta Medical Association estimates the physician shortage in Alberta to be approximately 1000.
- Peace Country Health region currently has 69 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 (see Appendix 1).
- Given population growth and expected retirements, Peace Country Health will need to recruit at least 192 family physicians between now and 2018 (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.

[1] This report was prepared by the Centre for Research and Innovation by Dr. Scott A. McAlpine , Dean of Arts and Science, Grande Prairie Regional College with the assistance and work of Sheryl Hoskins, Interim Lead- Corporate Business Office and Research Associate, Peace Country Health. Financial assistance for this report provided by Peace Region Economic Development Alliance (PREDA), Peace Country Health Board of Governors and Grande Prairie Regional College Board of Governors.

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.
- Difficulties of recruitment due to diverse and demanding practices.

The existing and proposed Alberta solutions to physician shortages in Alberta are a step in the right direction but insufficient to meet the needs of Alberta and of its rural North. In particular:

- Alberta universities only graduate about 250 medical doctors per year.
- At 10% attrition, per year and without population growth, Alberta needs over 500 physicians annually.
- The "Alberta-Integrated Community Clerkship" of the U of A and U of C will initially only place 24 medical students Alberta-wide.

Experience in other provinces and research has shown:

- Rural applicants to medical schools are 2-3 times as likely to establish rural practices as are urban applicants.
- The "70/70" rule of 70% of graduates staying within 70 miles of their institution is evident in medical training.
- Both Ontario and British Columbia have established Northern solutions to the particular problems of the North. These are the University of Northern British Columbia and the Northern Ontario Medical School.

Given the above and the detail throughout this brief, it is recommended that:

- A working group, including Government of Alberta representatives and other stakeholders, be established to examine options, costs, timing, etc. for a medical degree, offered by an existing University, to address the needs of Northern Alberta.
- Related to this, that 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.

- To support the above, that a partnership be created, by the community, to work together in support of a medical degree offered by an existing University. This partnership would include local and regional stakeholders such as the City of Grande Prairie, the County of Grande Prairie, local School Boards, First Nations organizations, Northern Alberta Development Council, Peace Regional Economic Development Alliance, other Peace Country communities such as Fairview, Beaverlodge, Hythe, etc., regional Community Health Councils, Peace Country Health and Grande Prairie Regional College, in cooperation with universities in Alberta or elsewhere.
- Grande Prairie Regional College offer an undergraduate science degree (B.Sc., as a GPRC degree or as a degree in collaboration with an existing University). Such a degree would give students potential access to further medical training either as medical doctors or in allied professions and should be available by the fall of 2008.

The Population of Alberta's North:

Northern Alberta has approximately 9% of the population of the province and accounts for approximately 24% of the province's GDP and $5.8 billion annually in revenues to the Government of Alberta.[2] By 2008, Northern Alberta will also contribute an estimated $3.0 billion to the revenues of the Government of Canada.[3] Supporting the tremendous economic contribution of Alberta's North is both a residential population estimated at 300,741 in 2006[4] counted through the normal census methodologies as well as a substantial "shadow population" of migrant, seasonal, and itinerant workers. In 2005, this "shadow population" was estimated to be 26,298 persons.[5]

The population of North-Western Alberta and, more specifically, the region within the boundaries of Peace Country Health accounted for 141,341 persons or approximately 45% of the Northern Alberta population in 2005.[6] The Northern Lights Health Region population is approximately 104,700.[7] In addition to this official population count **within** the boundaries of Peace Country Health and Northern Lights, the "shadow population" must be added (approximately an additional 10% in the rural municipalities, on average). The region **served** by specialists is not necessarily co-terminus with health region boundaries and is estimated at approximately 250,000 by Peace Country Health. In addition, the demographic pyramid of the Peace Country Health region reveals an aging "echo boom" population **as well as** a significant population of 18-30 year olds. The needs of the elderly and aging for health care are clear. However, the relative youth of

[2] *http://www.nadc.gov.ab.ca/Publications/reports/NADC-Contribution-highlights.pdf*
[3] *http://www.nadc.gov.ab.ca/Publications/reports/NADC-Contribution-full.pdf, p. 3.*
[4] *http://www.nadc.gov.ab.ca/Publications/reports/NADC-Contribution-full.pdf, p.53.*
[5] *http://www.nadc.gov.ab.ca/Publications/reports/Shadow-Population.pdf, p. 4.*
[6] *Data from Peace Country Health.*
[7] *Data from the Northern Lights Health Region.*

the area and the higher than average birth rate in the region puts additional strains on the health care system.

Taken together, the high and growing population of the North, its shadow population which also requires health care, the aging population, and the birth rates of the young people in the region **served** by Northern health regions all require a highly responsive and complete health care system. This can only be accomplished by having sufficient facilities and personnel to deliver health care to the growing and diverse population of the North.

Physician Demand Projections:

In 2006, the Alberta Medical Association estimated a shortage of 1088 physicians province-wide. This was expected to grow to 1541 by 2010.[8]

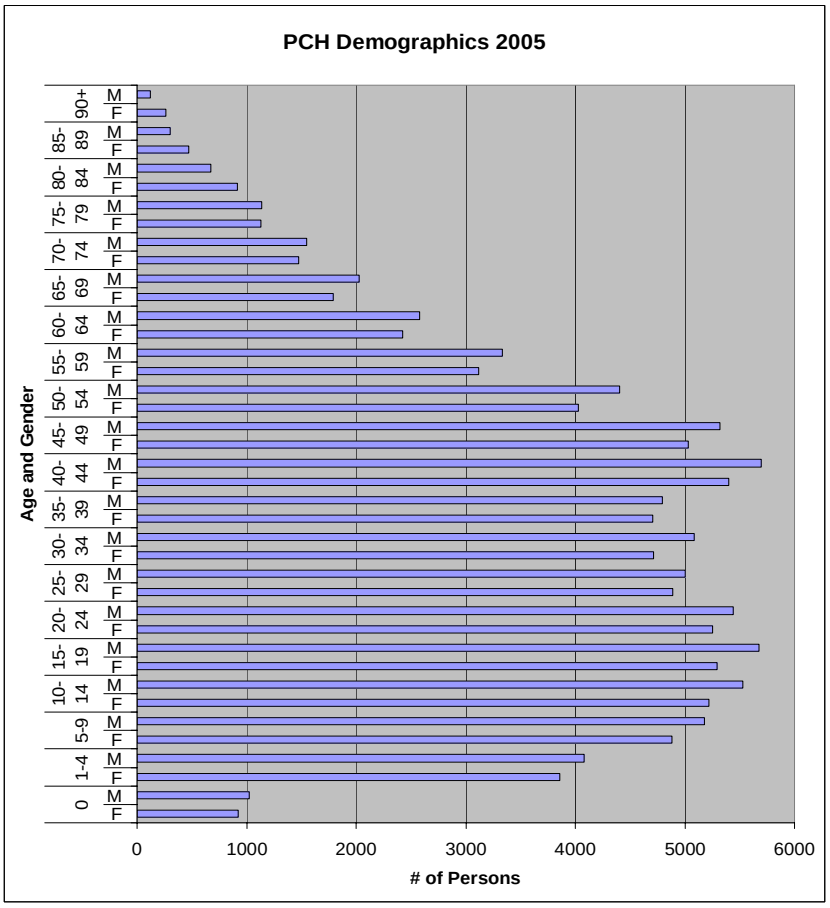
Physician Shortages Reported by Physician Resource Planning Committee (PRPC)

Measured in full-time equivalents (FTEs)

Report Year	*Number of Physicians*	*Current Shortage*	*Projected Physicians Needed*	*Projected Shortage*
2000	**4,579**	**333**	**5,909 by 2005**	**1,329 by 2005**
2005	**5,613**	**1,088**	**8,360 by 2010**	**1,541 by 2010**

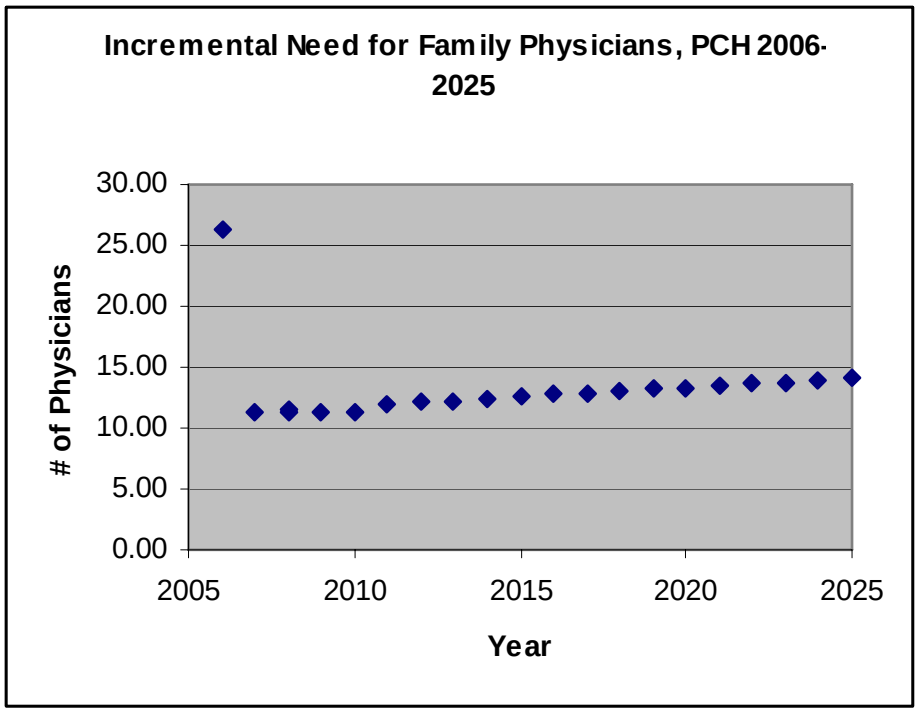
Sources: 2000 PRPC Report Data, Draft 2005 Report Data

[8] *http://www.albertadoctors.org/bcm/ama/ama-website.nsf/AllDoc/0D2682B3AE41472D872571CB00522C50/$File/preslet_aug16_06.pdf*



Within Peace Country Health, the current physician shortage is estimated at about 26 family physicians and 21 specialists. Long term population growth coupled with immediate needs and a turnover factor of 15% put the long term need at an additional 95 family Physicians and 59 specialists being needed by 2025 given Alberta Health and Wellness population projections, assuming that the goal is for this region to only meet the average number of physicians in the province of Alberta.

Examining only family physicians, and assuming a more modest 10% turnover rate/year, and **assuming the immediate need of 26 family physicians is met**, an additional 11 -15 physicians will be needed per year in the 2006 -2025 period in the Peace Country Health region alone to simply bring this region up to the provincial average of 74/100,000 population – a ratio which, according to the Alberta Medical Association, would still see Alberta with a physician shortage. The cumulative number of family physicians needed by 2025 to meet the existing need and need based on growth and modest physician turnover is 200. The physician needs of Northern Lights Health Region are detailed in Appendix 2.



Health Quality Indicators:

The unique health care needs of the North and issues of access to quality health care in Canada's North have been well documented in Canada. The "Romanov Report", for example, devoted considerable effort to discussing these needs of access and recruitment of physicians.[9] Briefly, the level of care available in much of Canada's North falls behind that available elsewhere.

Coupled with the issues of accessibility to services, health indicators in the North indicate at least a great a need for medical services as elsewhere. For example, using 2000/2001 data and Health Region boundaries, residents of Northern Alberta were more likely to be overweight and/or obese, suffer from injuries, smoke, suffer disability days, and in many cases, suffer risk of depression. However, residents of Northern Alberta were considerably less likely than other Albertans to have had contact with medical doctors in the past 12 months due, in part, to access. While the data series for the 2000/2001 data reported below has been discontinued by Statistics Canada, there is no reason to believe that the situation in Alberta's North has improved. Indeed, access issues are, if anything, worse now than they were in 2001 due to a large and growing shortage of medical professionals.

[9] *http://www.hc-sc.gc.ca/english/pdf/romanow/pdfs/HCC_Chapter_7.pdf*

Selected Health Indicators by Health Region, 2000/2001 (Percent of Population)

	Canada	Alberta	Mistahia	Peace River	Northern Lights
Overweight, body mass index (Canadian standard) higher than 27.0 (20 to 64 years)	31.9	33	38.4	38.9	39.5
Overweight, body mass index (International standard) 25.0 to 29.9 (20 to 64 years)	32.5	33.2	37.1	37.2	42.3
Obese, body mass index (International standard) 30.0 or higher (20 to 64 years)	14.9	15.9	16.8	17.8	19.3
With arthritis or rheumatism	15.2	15.9	16.2	14.4	9.8
Probable risk of depression	7.1	9.2	9.8	7.7	6.2
Injuries within past 12 months	13.3	17.4	18.1	18.8	14.2
1 or more two-week disability days	16.2	19	22.3	20.4	20.2
Activity limitation	30.4	35.1	36.3	34.4	28.7
Smoking initiation age (12 to 14 years)	30.3	30.4	38.2	32.6	34.3
Current daily or occasional smoker	25.9	27.6	31.2	31.5	32.9
5 or more drinks on one occasion, 12 or more times a year	20.1	22.5	23.8	31.5	30
Consume fruits and vegetables 5 or more times per day	37.2	32.6	26.7	27.1	29
Exposure to second-hand smoke in the last month	27.6	29.7	30.8	36.4	41
Contact with medical doctors in past 12 months	81.3	80.9	77.1	79.1	78

Source: Canadian Community Health Survey (CCHS 1.1) indicator profile, by sex, Canada, provinces, territories, health regions (January 2000 boundaries) and peer groups

Recruitment Challenges:

To meet the physician need, Peace Country Health has, as have other health regions in Alberta and Canada-wide, increasingly resorted to international recruitment. However, these strategies have clearly not been effective and are of questionable merit from a global citizenship perspective.

In a general sense, the failure of recruitment is not a failure of the recruiters but rather is a systemic failure based, in part, on the ability to retain professionals in rural, Northern areas. Because of this, physicians in rural under-serviced locations typically carry a greater practice burden than their urban colleagues. This is seen in greater population to physician ratios, broader scopes of practice, and less support than a typical urban practice, all of which have an impact on patient access.

Service activities in some Peace Country Health facilities are decreasing, not due to decreased need, rather due to lack of physician resources. For example, surgical services in two communities have been severely curtailed due to lack of physician resources. Recruitment efforts have, on balance, been unsuccessful due to a number of factors:

- There is a national and worldwide shortage of physicians.
- Canadian medical schools are not educating enough physicians to fulfill the need.
- Physicians experience a 'professional isolation' factor which relates to access to other colleagues, travel distances to attend Continuing Medical Education and other educational events.
- The Northern communities have a lack of amenities compared to urban counterparts in terms of museums, universities and shopping which have an impact on a family's willingness to locate in Northern Alberta.
- Housing costs/rental costs are a deterrent for those coming to work up north. A new professional is usually already burdened with debt from university costs, add the high costs of living expense and office costs, and this combination is not very attractive.
- Distance from a major urban centre (in this case Edmonton) increases the time needed away from clinical service delivery for holiday time if international travel is planned.
- Locum support and respite for physicians is variable.
- Access to specialists is limited. Primary care physicians are relied on to provide services that would be provided by specialists in large urban centers.
- There is an insufficient critical mass to support the recruitment of enough physicians to ensure a reasonable lifestyle (i.e., community may not support 3 physicians, but without a 3rd physician on-call demands are too high).
- Access to supporting programs such as mental health, and other health professionals may be unreliable.
- Current facility infrastructure in several areas is insufficient for service demands and directly impacts recruitment and retention.

Dr. McMillan (President of Canadian Medical Association) noted that Canada now has 2.1 physicians per 1,000 people compared to the Organisation for Economic Development (OECD) average of 2.9 physicians per 1,000 people. To get to the OECD level, Canada will need an additional 20,000 physicians (August, 2006).

Existing and Proposed Methods to Bridge the Gap:

In 2000, the University of Alberta announced an expansion of 20 additional spaces for medical students bringing the total at that institution to 134. The University of Calgary in 2006/2007 had 125 positions. Given that Alberta is over 1000 physicians short according to the Alberta Medical Association (cited above), the probability of closing the gap with existing programs is nominal. In addition, the unique challenges facing Northern and remote practices (case-load, quality of life, etc.) mean that the bulk of graduates of existing programs in Alberta go into practice in urban areas. Moreover, as the University of Northern British Columbia medical school proposal noted, "researchers often refer to the '70/70' rule. 70% of graduates tend to stay within 70 miles of where they were trained."[10]

The proposed "Alberta–Integrated Community Clerkship" program of the University of Alberta and the University of Calgary with its promise to develop 10-12 sites across Alberta for 10-12 students of each of the University of Calgary and the University of Alberta (initially up to 24 students in total across **all** of Alberta) is an indication that the universities are also seeing the need for more physicians particularly in rural/remote areas of the province. Yet the number of spaces falls far behind the need. This will not solve a province-wide 1,000 physician shortage nor the long term needs of Peace Country Health for 100 additional family physicians alone.

The Alberta Rural Physician Action Plan vision of "Having the right number of physicians in the right places, offering the right services in Rural Alberta"[11] is also a step in the right direction. Similarly, the Rural Alberta Development Fund's emphasis which includes health care initiatives is positive. However, given the low number of graduates from the existing medical school facilities in Alberta, a greater emphasis on medical training is required to fill the gap.

[10] *The Universities President's Council of British Columbia, "Learning Where we Live: Doubling the Number of Medical Graduates in British Columbia," p. 15.*
[11] *http://www.rpap.ab.ca/about/home.html*

Examples from Other Jurisdictions:

On February 26, 2001, the Canadian Medical Association (CMA) expressed "surprise" that Dalhousie University was not funded to open more spaces in its medical program. The CMA noted that "In Nova Scotia, there are close to 50 physician vacancies to be filled".[12] In 2004, the CMA reported the results of a study of physicians in Canada two years after graduation and found "Overall, 20.9% of family practice trained physicians and 4.4% of specialty trained physicians practiced in rural areas (population < 10 000)"[13] Moreover, "with applicants of rural origin being two to three times as likely to become rural practitioners as their urban counterparts,"[14] the CMA research suggests that rural training is the most effective way to solve rural shortages.

Findings and observations similar to this were, in fact, the genesis behind the University of Northern British Columbia's community-based efforts to establish a medical school in Prince George[15] and the recent efforts of Laurentian University and Lakehead University to establish the Northern Ontario School of Medicine.[16] (See Appendix 3).

In both the British Columbia and Ontario cases, schools of medicine were established through partnerships between existing medical schools, communities and existing degree granting institutions which were able to offer undergraduate pre-entry Bachelor of Science credentials. In each, the Northern program was specifically designed to meet the needs of the North. These programs serve as examples and potential models for Northern Alberta.

Medical Training in the Peace Region:

There is a history of teaching medical students in the region, including Grande Prairie as a rural medical teaching centre for the Rural Physician Action Plan (RPAP) and Peace River a resident training site. The region serves a large rural area with opportunities for training medical students and residents. Peace River has also been selected as a site for the proposed Integrated Community Clerkship Program by the University of Alberta and University of Calgary.

In addition, there is a long history of collaborative efforts in the region's post-secondary education system that can be built upon between the College, universities and other stakeholders.[17]

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[12] *http://www.cma.ca/index.cfm/ci_id/9490/la_id/1.htm*
[13] *http://www.cma.ca/index.cfm/ci_id/36843/la_id/1.htm*
[14] *http://www.cma.ca/index.cfm/ci_id/36843/la_id/1.htm*
[15] *Learning Where we Live*
[16] *http://www.normed.ca/*
[17] *This has included degree completion in Nursing at GPRC and agreement between Peace Country Health and Grande Prairie Regional College to explore other collaborative possibilities and partnerships.*

Peace Country Health and Grande Prairie Regional College have committed to work collaboratively to address medical training needs. Grande Prairie Regional College also has experience with collaborative arrangements for degree programs with University of Alberta, University of Calgary and the University of Northern British Columbia.

At this time, a new regional hospital has been approved and is being planned—there is an opportunity to design, from the ground up, a facility that incorporates educational features.

Toward a Northern Alberta Strategy:

The shortage of family and specialist physicians in Alberta is acute. This is particularly the case in rural and Northern Alberta and has been recognized by the Alberta Medical Association, Alberta Health and Wellness, and in the Rural Alberta Development Strategy. For Peace Country Health, the existing shortage of Physicians in **one** region of Alberta is equivalent to the shortage in the entirety of Nova Scotia in 2004 – a shortage which caused some concern for the Canadian Medical Association.

To alleviate the shortage of physicians in Alberta's north, it is recommended that:

- A working group, including Government of Alberta representatives and other stakeholders, 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. This partnership would include local and regional stakeholders such as the City of Grande Prairie, the County of Grande Prairie, local School Boards, First Nations organizations, Northern Alberta Development Council, Peace Regional Economic Development Alliance, other Peace Country communities (such as Fairview, Beaverlodge, Hythe, etc.), regional Community Health Councils, Peace Country Health and Grande Prairie Regional College, in cooperation with universities in Alberta or elsewhere.
- Grande Prairie Regional College offer an undergraduate science degree (B.Sc., as a GPRC degree or as a degree in collaboration with an existing University). Such a degree would give students potential access to further medical training either as medical doctors or in allied professions and should be available by the fall of 2008.

Support:

Support for a Northern Alberta solution to the medical training needs of Peace Country Health is widespread. For example, a recent Grande Prairie & District Chamber of Commerce survey indicated that, among Chamber members "Doctor Retention/Medical Staff Training" was within the top three issues facing the region.[18] A letter of support for this initiative is being sought from this organization. In addition, letters of support are being sought from:

- The City of Grande Prairie
- The County of Grande Prairie
- Local School Boards
- Grande Prairie Regional College
- First Nations Organizations
- Northern Alberta Development Council
- Peace Regional Economic Development Alliance
- Other Peace Country communities such as Fairview, Beaverlodge, Hythe, etc.
- Regional Community Health Councils

It is expected that support for the initiative will be widespread and that the planning phase of the initiative can begin immediately. This project, with the full support of the community, may be jointly led by community members.

[18] *Grande Prairie and District Chamber of Commerce, "Spring of 2007 Survey Results".*

Appendix 1:

Details of Peace Country Health Family Physician Recruitment Needs in Full Time Equivalent (FTE)

	Current	*Short Term Needs*	*Intermediate Needs*	*Intermediate Needs*	*Total Recruitment*
	2006-07 (actual)	2008	2010	2018	**Needed over next 20 years**
Alberta Health and Wellness Population Projections	141,341	146,041	156,443	201,005	
Family Physicians (FTE)	98				
Current Rate / 100,000	69.3				
Additional FTEs needed to bring to 103/100,000	47	5	11	51	**114**
Total FTEs	**145**	**150**	**161**	**212**	
Additional 10% per year for Turnover and/or Retirement		15	16	21	**52**
114+52 **= 166**					
Additional 15% per year for Turnover and/or Retirement		22	24	32	**78**
114+78 **= 192**					

** Family physician resources in FTE needed are based on:*

- Projected population statistics from Alberta Health and Wellness Population Projections 2004-2033

- Calculation to determine need based on CIHI Physician Resource Info that stated Alberta average is 74/100,000 in 2004.
- 74 x 135,978 / 100,000 = 100.6
- Total recruitment needs based on differences between what is current and projected
- 10% and 15% turnover/retirement projects based on the total FTE required. This assumes a steady turnover, whereas some communities may be higher or lower due to the demographics of the physicians
- These calculations are presuming a turnover every 5 years, giving a high number of 121. If using a yearly turnover, this number would be closer to 278.

Appendix 2:

Northern Lights Health Region Physician Needs

Population	Actual 2006		Projected 2011	Projected 2017
Actual and projected	104,700		147,061	183,576
General Practitioners / Family Doctors	**Actual 2006**	**Total Required 2006**	**Total Required 2011**	**Total Required 2017**
East	18	33	49	63
West	8	13	15	16
Total Family Medicine	26	46	64	79
Emergency	**Actual 2006**	**Total Required 2006**	**Total Required 2011**	**Total Required 2017**
Emergency Medicine	7	11	16	21
Specialists	**Actual 2006**	**Total Required 2006**	**Total Required 2011**	**Total Required 2017**
General Surgery	2	3	5	6
Orthopedist	1	3	5	6
Obstetrics / Gynecology	3	3	4	5
Pediatrician	2	3	4	6
Psychiatrist	2	4	5	6
Child Psychiatrist	1	1	1	2
General Internal Medicine	1	1	1	2
Intensivist	1	1	2	3
Cardiologist	0	1	2	3
Nephrologist	0	1	2	3
Gastroenterologist	0	0	1	1
Anesthesiologist	3	3	5	6
Oncologist	0	0	1	1
Ophthalmologist	0	1	2	3
Otolaryngologist	0	1	2	3
Urologist	0	1	1	2
Plastic Surgery	0	0	0	2
Pathologist	0	1	1	1
Total Specialists	16	28	44	61
Total NLHR Physician Needs	**Actual 2006**	**Total Required 2006**	**Total Required 2011**	**Total Required 2017**
Total NLHR Physicians	49	85	124	161

Figure 2 - Projected NLHR Physician Needs for 2006, 2011 and 2017

Source: Data from Northern Lights Health Region

Appendix 3:

Introductory Letter, Northern Ontario School of Medicine

Future docs will enhance North's medical care now, Dean predicts

by Dr. Roger Strasser
Founding Dean, Northern Ontario School of Medicine

Don't look now, but Northern Ontario is approaching yet another medical milestone. For the first time ever, the North is about to launch its own Medical Residency program, one administered by and accredited to a Northern institution.

Effective July 1st, the Northern Ontario School of Medicine will be responsible for 30 Medical Residents who will begin their two years of Family Medicine training here in Northern Ontario. Our Family Medicine Residents of the Canadian Shield or FMRoCS program is the first new Family Medical Residency program accredited in Canada in 33 years.

The North has hosted Medical Residents for many years, but the programs in place were administered under the aegis of the University of Ottawa (in Northeastern Ontario) or McMaster University (in Northwestern Ontario.)

Also beginning next fall, the first batch of 56 Third Year Undergraduate NOSM students will begin their community clerkships across the North. An additional nine Third Year Post-Graduate residents will also be in place effective July 1st, taking one year programs; six will be studying Emergency Medicine and three Anesthesia.

In all, by this coming fall 95 doctors-to-be will be in the field in Northern Ontario. Never before have there been so many undergraduate and post-graduate medical students providing varying levels of care to Northern patients as part of their medical training. This will result in an immediate, and noticeable, improvement to health care delivery across the North.

You will see these doctors of the future in your physician's office, in Emergency Rooms, on hospital floors, and in clinics throughout Northern Ontario. While not yet fully licensed medical practitioners, these individuals will nevertheless play a crucial intermediate role in helping to alleviate the doctor shortage here in the North.

Let me explain the distinctions between an undergraduate medical student, a postgraduate resident, and a full-fledged, licensed medical doctor:

- **an undergraduate** is enrolled in a three- or four-year MD program at a Canadian medical school: (at NOSM it's a four-year program). A graduate of such a program is an MD, but is not entitled to full practice;

- **a post-graduate** medical resident has completed an MD program, is considered a medical service provider, and is paid a salary while he or she completes any one of a number of residency programs. These vary in length from two to five years, depending on the specialty;

- **a licensed physician** has completed both an undergraduate and post-graduate course of study, and has passed an examination from either the College of Family Physicians of Canada (for Family and some Emergency practices) or the Royal College of Physicians and Surgeons of Canada (for some other Emergency practices and all other specialties.)

As these three levels of medical education and practice come into play in a clinical setting, observant patients may become aware of a nearly seamless web of interactive and hands on medical education occurring in their presence. This instruction is nuanced, and anything but one-way.

Unlike many other professions, there is a professional obligation among doctors not only to constantly refresh and upgrade their expertise, but to share that knowledge as well. Any well-rounded physician is expected to be a teacher, as well as a clinician.

All in all, there is a synergy among the three levels of medical education and experience that works to the benefit of everyone, most importantly the users of the health care system.

I would be remiss if I didn't acknowledge the outstanding groundwork that made RoCS possible. We are standing on the broad shoulders of the Northwestern Ontario Medical Program (NOMP) of McMaster, and the Northeastern Ontario Medical Education Corporation (NOMEC), of Ottawa U.

Their pioneering efforts in rural family medicine residencies across Northern Ontario have greatly accelerated and facilitated the creation of FMRoCS.

Right from the start, we here at NOSM pledged to "improve the health of people in Northern Ontario." Even though our first graduates won't be licensed for full practice as Family Physicians until 2011, I believe we'll start making good on that promise, in earnest, as early as this fall.

The attending physician is in overall charge, of course, but is also acting in the role of clinical teacher to the undergraduate and medical residents in his or her charge. Thanks

to the two well-established Northern residency programs mentioned above, more than 500 doctors in Northern Ontario have already served as NOSM clinical faculty members.

The clinical teacher is imparting his or her direct experience with a given patient, pathology, or community to the medical learner.

The Medical Resident is both a teacher, and a learner. He or she may be a clinical supervisor of an undergraduate medical student – in fact such supervision is a requirement of most Residency programs – and, to some degree, a teacher of the attending physician as well.

Practicing physicians, most of whom are seriously overworked, are always at pains to stay abreast of the latest scientific and medical developments in their fields. Contact with a Medical Resident, who is fresh out of school and au courant with the newest techniques, is often a convenient way to do just that.

The Northern Ontario School of Medicine is a pioneering faculty of medicine. The School is a joint initiative of Lakehead and Laurentian Universities with main campuses in Thunder Bay and Sudbury, and multiple teaching and research sites across Northern Ontario. By educating skilled physicians and undertaking health research suited to community needs, the School will become a cornerstone of community health care in Northern Ontario.

Source: http://www.normed.ca/events_publications/deans_column/Feb2007.htm