

## Family Medicine Residents Choose the North

The Family Medicine Tracking Study is a multi-year study that tracks the residents and graduates of the Northeastern Ontario Family Medicine Program (NOFM). This community-based, two-year residency program, operated from Sudbury and affiliated with the University of Ottawa, is designed to train graduates from any Canadian medical school for the practice of family medicine. It provides residents with special skills and experience for practice in northern and rural settings. A goal of the program is to support recruitment and retention of physicians in northeastern Ontario.

### Numbers of surveys returned by residents and graduates each year

Survey Date	Entry	Exit	2-Year Grads	5-Year Grads	Total
1999	11	('97) 10	('95) 11	('92) 11	43
2000	16	('98) 12	('96) 9	('93) 8	45
2001	13	('99) 12	('97) 11	('94) 13	49
2002	14	('00) 16	('98) 12	('95) 12	54
2003	10	('01) 12	('99) 11	('96) 9	42
Total	64	62	54	53	233

The year of entry of the cohort is in brackets.

The tracking study was initiated in 1999 and entails entry surveys, exit surveys and follow-up surveys. This *Research in FOCUS on Research* looks at the four surveys that were conducted each year from 1999 to 2003. The overall response rate was 86%. One-half of the respondents were female. Of the new residents, 38% lived with a spouse or partner and 5% had one or more children. These figures increased to 77% and 53%, respectively, for the five-year graduates.

Because of the regional context and goals of the NOFM Program, the questionnaires contained several questions related to location: the residents' previous experience of the North, where they intended to practise, and where the graduates actually did practise. This issue of *Research in FOCUS on Research* examines the answers to these questions, while a separate issue looks at the study findings related to the NOFM training and the medical practices of the graduates.

### Northern Exposure

The 233 surveys were received from 149 unique individuals. Only about one-third of these indicated that they had spent most of their life in northern Ontario, while close to half of them had lived for the most part in southern Ontario. The remaining unique respondents were from other parts of Canada (11%) and from outside Canada (3%).

This issue of *Research in FOCUS on Research* is based on research reports of the Family Medicine Tracking Study, a multi-year study that tracks the residents and graduates of the Northeastern Ontario Family Medicine Program (NOFM). The reports were prepared by researchers of the Centre for Rural and Northern Health Research, Laurentian University, in collaboration with NOFM.

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Of the 146 unique NOFM residents and graduates who answered the question about community size, 25 had lived mostly in metropolitan areas (pop. > 500,000), 37 in mid- to large-size cities (pop. 100,000 to 499,999), 31 in small cities (pop. 25,000 to 99,999), 34 in towns (pop. 2,000 to 24,999) and 16 in rural communities (pop. < 2,000). Thus, 58% were from communities with fewer than 100,000 people. Close to half of their spouses/partners were also from smaller communities. In contrast, the 2001 Census shows that only 22% of the general Ontario population live in communities where the population is below 100,000.

Over 85% of the unique respondents indicated that they had spent some time in northern Ontario, including electives (blocks of time in a chosen clinical setting) at medical school, before enrolling in the NOFM Program. About three-quarters of these said that this experience had had a positive influence on their perception of northern Ontario medical practice.

Two-thirds of the 176 rural and northern electives reported by the respondents had been completed in northeastern Ontario, one-quarter in northwestern Ontario, and the rest in southern Ontario or elsewhere in Canada. Twenty-nine reported they had done no northern or rural electives.

The communities where these electives were done are widespread. Sudbury leads the list, followed by Timmins, Sioux Lookout, and Thunder Bay. Many small northern Ontario communities are on the list, for example, Gore Bay, Powassan and Temagami.

## Practice Intent

### When

All of the new residents in 1999, 2002 and 2003 and most of those in 2000 (88%) and 2001 (82%) intended to begin to practise medicine immediately after graduation. Somewhat fewer of them expected to be practising two years after graduation, and this dropped below 75% as they looked forward five and ten years after graduation. The exception was the class of 2003, where all intended to still be practising two, five and ten years down the road.

Those surveyed at graduation also showed a strong intent (90%) to practise immediately. This generally dropped off to between 60% and 80% as they looked two, five and ten years into the future.

### Where

About 20% of the new residents gave no response or were undecided about where they would like to practise when they graduated. This uncertainty increased as they looked further into the future. For their first practice, northeastern Ontario appealed to the largest number of new residents, from 56% in 2000 to 82% in 1999 and 2001. This dropped off to between 30% and 60% for practice at two, five and ten years hence, as the numbers of undecided increased. Far fewer of the new residents intended to practise in northwestern Ontario, southern Ontario or in locations outside Ontario.

At graduation, the residents were more decided about where they wanted to practise. Again, the most common choice was northeastern Ontario, but this was chosen less as indecision increased when they looked two, five and ten years into the future. In addition, several in the 1997 cohort (surveyed at graduation in 1999) showed an intent to move away from northeastern Ontario to southern Ontario, while several in the 2001 cohort (surveyed in 2003) intended to move from northeastern Ontario to non-specified locations elsewhere.

### Intended size of practice location upon graduation

Size of community*	Response at Entry (n = 59 <sup>†</sup> ) %	Response at Exit (n = 55 <sup>†</sup> ) %
Metropolitan area	0	4
Mid- to large-size city	15	13
Small city	24	35
Town	56	38
Rural area	2	5
Undecided	3	5

\* See community size definitions above.

<sup>†</sup> 5 entry respondents and 7 exit respondents did not answer this question.

Note: Most exit respondents are the same people as the entry respondents, just two years later.

## Size of community

Most residents intended to practise in small cities and towns. Fewer at graduation than at entry planned to practise in towns, with the shift being towards small cities and even metropolitan areas. A similar shift towards larger communities, along with increased indecision, showed up as residents looked further into the future.

## In Actual Practice

### When

Of the 104 two-year and five-year graduates who indicated how soon they had begun their practice after graduation, 82 had begun their practice in their graduating year, 19 in the following year, 1 after two years, and 2 had already begun their practice prior to graduation.

### Where

The two-year and five-year graduates combined were practising as follows:

- ▶ 6% in metropolitan areas
- ▶ 5% in mid- to large-size cities
- ▶ 54% in small cities
- ▶ 33% in towns, and
- ▶ 2% in rural areas.

Even more were actually practising in small cities and towns than indicated in the residents' intentions. The table below shows the distribution of these locations by region and by survey year.

## Mobility

More than half of the graduates reported having stayed in their initial practice community since graduation, ranging from one to five years. About half, once established in a community, intended to stay six years or more.

The handful of graduates who had practised mostly as a *locum tenens* had lived in five or more communities. This accounted for most of the moves, but among other reasons given for leaving a community were: a stressful work environment, lifestyle factors, a shortage of professional backup, spousal employment, and opportunity for further medical training or expertise.

## Factors influencing location of medical practice

For those graduates who had a spouse or partner, the influence of that spouse or partner was *extremely important* in the decision on where to practise. Other factors most often described as extremely important were:

- ▶ proximity to extended family/relatives and to friends/colleagues
- ▶ lifestyle of the community and quality of the physical environment in the area
- ▶ opportunity for a variety of medical experiences
- ▶ previous medical practice in the community (e.g. electives, locums) or contacts with healthcare professionals in the community.

Current Practice Locations (2-year and 5-year graduates combined)	Survey Year				
	1999 n = 22	2000 n = 17	2001 n = 24	2002 n = 23*	2003 n = 19*
<i>Northern Ontario</i>					
Small city	15	6	7	14	7
Town	3	3	9	5	5
Rural area		1		1	
<i>Southern Ontario</i>					
Metropolitan area		1	3	1	1
Mid- to large-size city		2	1		1
Small city		1			3
Town	2	2	3	2	1
<i>Outside Ontario</i>					
Mid- to large-size city	1				
Small city	1	1	1		1

\* One respondent in each of 2002 and 2003 did not answer this question.

Among the less important factors in influencing practice location were: income potential, opportunity for career advancement, adequate on-call coverage, availability of continuing medical education opportunities, and access to specialists.

Some graduates practising in northern or rural areas felt that they were there because of the exposure the NOFM Program had given them to the style of practice and to different northern and rural communities.

## Satisfaction

The graduates reported strong satisfaction with several aspects of their practice environment: job career opportunities for their spouse, spouse's contentment in the community, quality of education for their children, availability of recreational activities, and proximity to family. Interestingly, these factors were also among the most important influences on their choice of practice location.

- ▶ *“Support in starting a practice, knowledge of medical community, extreme need for doctors equals full practice as soon as possible.”*
- ▶ *“I never would have been exposed to this community or felt confident enough to practise here if I had not been in the NOFM Program.”*
- ▶ *“The NOFM training had no bearing on the size of community I'm now in.”*
- ▶ *“If I had not come here as a resident, I am not sure I would have come to do any locum work.”*
- ▶ *“I'm practising in an urban setting due to my partner's job.”*
- ▶ *“The NOFM Program prepared me very well to practise in a rural setting.”*
- ▶ *“I'm from the North and wanted to live and work in the North.”*

## Summary

- ▶ Time spent in northern Ontario by residents before they enrolled in the NOFM Program generally had a positive influence on their perception of northern Ontario medical practice.
- ▶ Of the graduates who responded to the survey, 88% were practising in communities under 100,000, while only 63% of new residents had grown up in communities of that size or smaller.
- ▶ The intent to practise in northeastern Ontario decreased somewhat the further the respondents looked into the future.
- ▶ By the two-year mark after their graduation, 99% of graduates had begun their medical practice. Most had been practising in the same community for from one to five years. Once established in a community, about half intended to stay for six years or more.
- ▶ Personal considerations, such as spousal and family influence and lifestyle, are among the most important factors in the graduates' decisions about practice location.
- ▶ Consistent with the intent of NOFM residents, about two-thirds of the graduates stayed to practise medicine in northeastern Ontario. However, only one-third of them grew up in northeastern Ontario. This suggests that the NOFM Program and the Northern Electives Program (NEP) may have played a role in influencing physicians' practice location decisions.

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