



Future Practice of Medical Students at the Northern Ontario School of Medicine— Part 1: Methodology and Intended Medical Discipline

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Saturday, June 11th, 2011

What is the NOSM TS?

- A study on the effects of northern/rural Under graduate and Post graduate medical education on medical students and residents.
- A multi-year, multi-method (survey and interview) longitudinal study
- The study is approved by the Research Ethics Boards at both Laurentian and Lakehead Universities
- CRaNHR is an unaffiliated research centre operates independently from NOSM. which

Timing of Survey

Timeframe of the Tracking Study of NOSM Students and Graduates

Survey Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Entry (Cohort) Year										
2005	UGE		UGM		UGX	PGE		PGX	FI	
2006		UGE		UGM		UGX	PGE		PGX	
2007			UGE		UGM		UGX	PGE	PGX	
2008				UGE		UGM		UGX	PGE	
2009					UGE		UGM		UGX	PGE
2010						UGE		UGM		
2011							UGE		UGM	

UGE = Undergraduate Entry Survey

UGM = Undergraduate Midway Survey

UGX = Undergraduate Exit Survey

PGE = Postgraduate Entry Survey

PGX = Postgraduate Exit Survey

FI = Follow up 1 Survey

Modelled for a 4-year undergraduate medical education program (shaded) and a 2-year residency training program (thick border).

Main Outcome

- Medical Discipline
 - Family Medicine Specialty
 - Royal College Specialties
 - (e.g. Pediatrics, Orthopedics, Internal medicine, Psychiatry, OB/GYN)
- Response rate:
 - Individual survey response rate:
 - Low of 73%
 - High of 95%
 - Cohorts 2005 - 2007 = 123 of 169 (73%)
 - Represents those who filled out both Entry & Exit surveys



Demographic Characteristics

- **Gender**
 - 66% are female
- **Language of spoken proficiency**
 - 42% = Bilingual (both official languages)
 - 58% = English (English only or English + a language other than French)
- **Marital Status:**
 - Entry 41% married
 - Exit 45% married



Demographic Characteristics

- Mean age at EXIT
 - 31 years

- Northern Background (prior to age 18)
 - 0 years 13%
 - 1 to 9 years 3%
 - 10 to 17 years 26%
 - 18 years 58%

- Rural Background (prior to age 18)
 - 0 years 54%
 - 1 to 9 years 12%
 - 10 to 17 years 13%
 - 18 years 22%



Discipline choice




N= 123

	Entry	Exit
Family Medicine Specialty	45%	61%
Royal College Specialties	55%	39%

- This change is significant (McNemar $p=0.008$)
 - 33 individuals who intended to pursue RCS at entry were matched to a Family medicine program at Exit vs. 14 moved in the opposite direction.

Demographic Characteristics in relation to Discipline choice


	Pearson's Chi Squared 		
	Entry	Exit	
Gender	p=0.22	p=0.35	p=0.57
Language	p=0.70	p=0.51	p=0.86
Marital Status	p=0.28	p=0.02	p=0.11

- Marital status

	Stayed Married	Changed to Single	Stayed Single
Family Medicine Specialists	51%	RCS	47%RCS
Married Royal College Specialists	55%	52%	36% 69%29%

- Pearson's Chi Squared = 5.774, p=0.02

Demographic Characteristics in relation to Discipline choice

	t-test		ANOVA
	Entry	Exit	
Age at Exit	p=0.42	p=0.02	p=0.13
Northern Background	p=0.11	p=0.61	p=0.19
Rural Background	p=0.60	p=0.75	p=0.18

- Age at Exit Background

	Stayed	Mean	Changed to	S.D.	Stayed
Family Medicine Speciality		18.3	RCS	7.0	RCS
Royal College Specialities	21.5	29.0	29.5	5.2	29.0

: t-test = -2.373, p=0.02
 : t-test = -1.618, p=0.11

Conclusion

**Discipline intent
@ Entry**



**Discipline intent
@ Exit**

Royal College Specialties  Family Medicine Specialty

- Demographic characteristics
 - Gender
 - Language
 - Marital Status
 - Age
 - Northern Background
 - Rural Background

Acknowledgements

- Acknowledgements
 - Research funding for the NOSM tracking study is provided by the Ontario Ministry of Health and Long-Term Care. CRaNHR and the research team wish to acknowledge the MOHLTC's support.
 - The students for their participation.
 - NOSM for their continued cooperation throughout this study.
- Part 2: Intended Practice Location!
 - After the break, M.G. Delmege will expand upon these findings and focus in on students inclination towards particular geographic locations and community sizes.



Thank-you

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