

# Canada's Faculties of Medicine by the Numbers

## 2010 CAPER-ORIS Forum

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Canadian Post-MD Education Registry – Office of Research and Information Services  
Association of Faculties of Medicine of Canada (AFMC)

Canadian Conference on Medical Education  
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St. John's, Newfoundland and Labrador, Canada





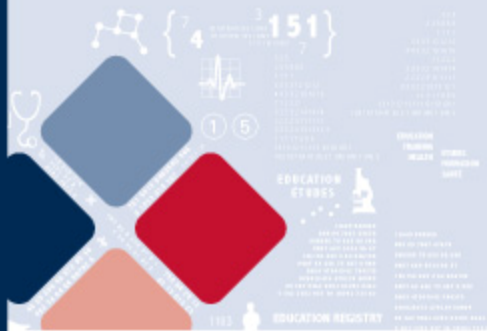
# Session Plan



- Three Data Frames to prompt discussion
- Main discussion areas
  - Getting Through the Door: Who applies to and who enters MD programs
  - Capacity Crunch: How are faculties of medicine responding to increased enrolment?
  - On the Move: Taking an upstream view of physician mobility

# Getting Through the Door:

## Who applies to and who enters MD programs





# Data Frame:

Who applies to and who enters MD programs

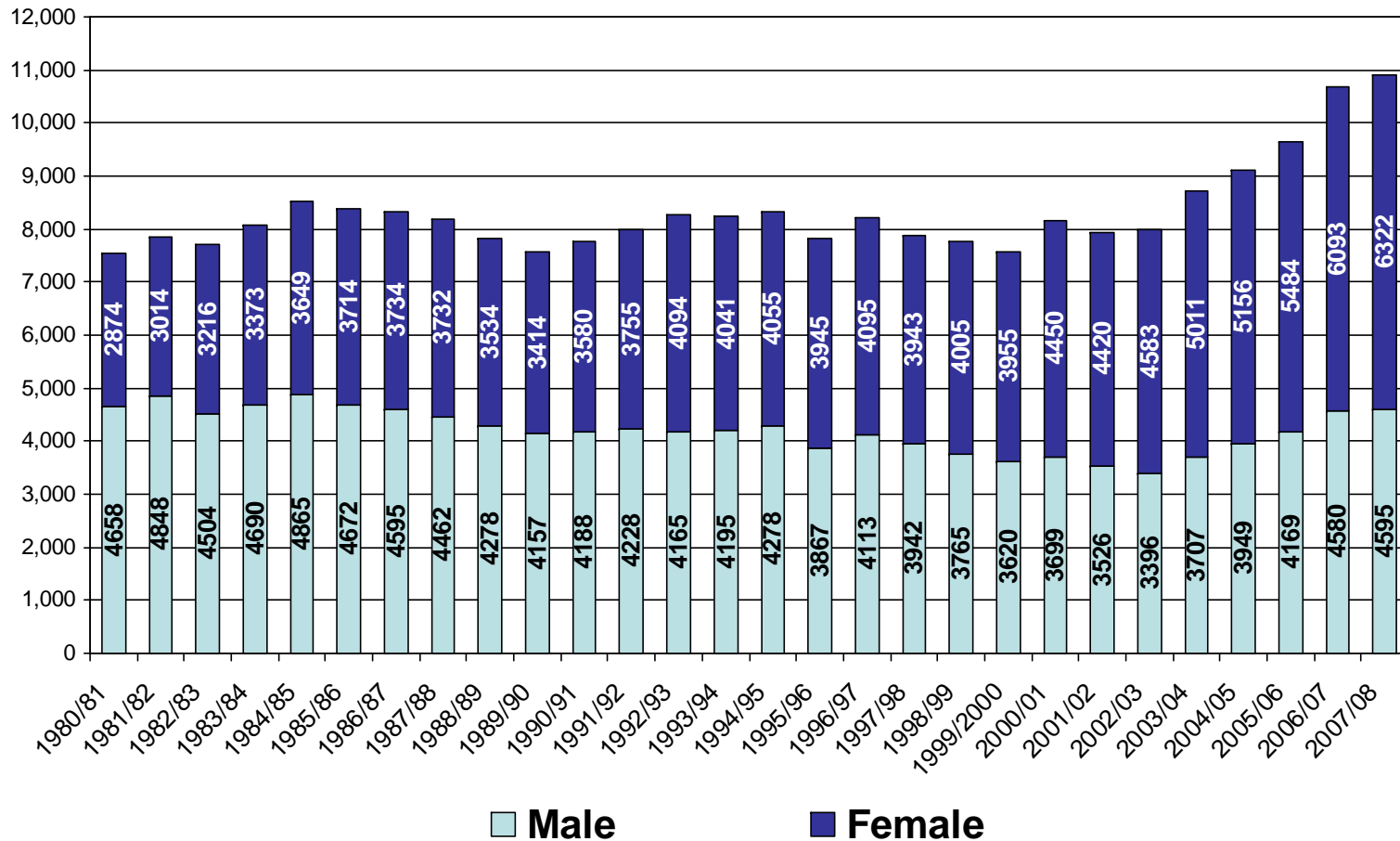
- MS-8. Each medical school must develop programs or partnerships aimed at broadening diversity among qualified applicants for medical school admission.  
(LCME-CACMS Accreditation Criteria)
- FMEC Recommendation II: Enhance Admissions Processes
  - ...in order to achieve the desired diversity in our physician workforce, Faculties of Medicine must recruit, select, and support a representative mix of medical students.



# Data Frame:

## Who applies to and who enters MD programs

MD Program Applicants by Sex, 1980-81 - 2007-08



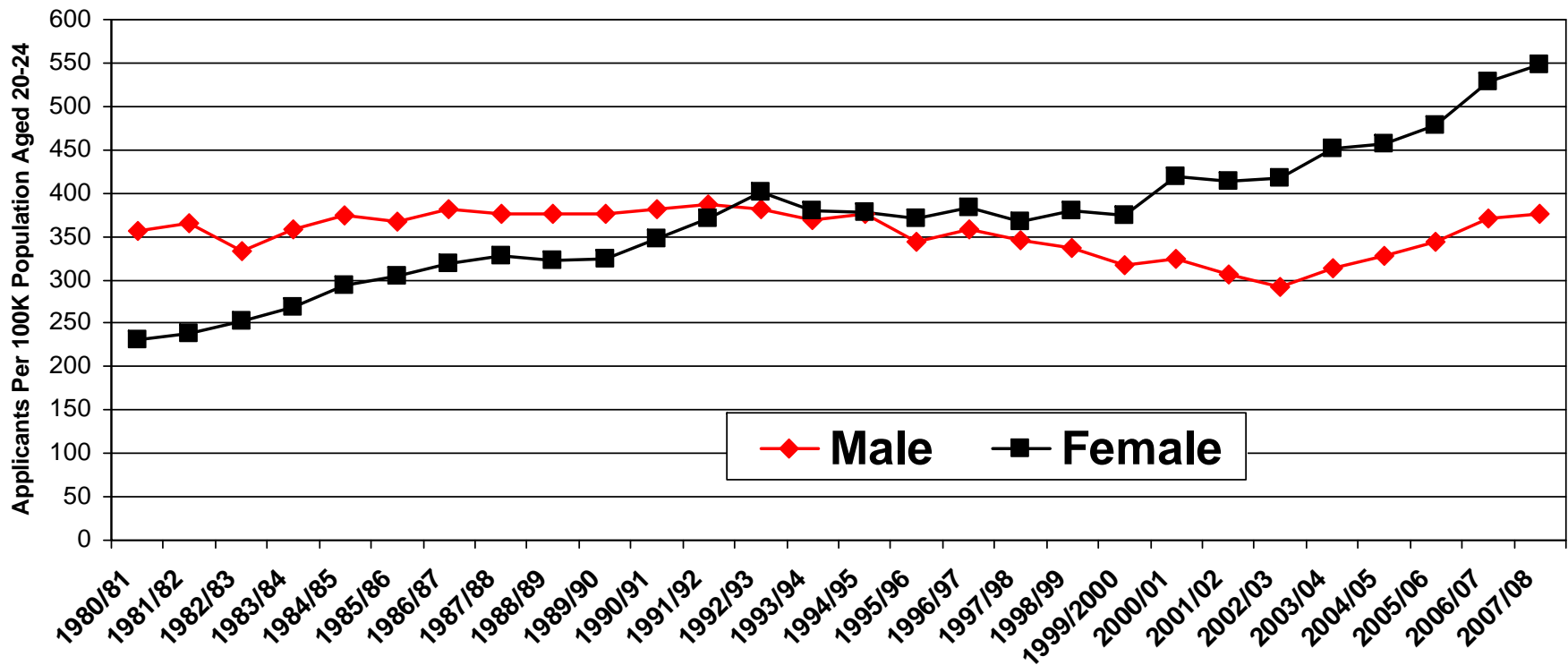
Source: ORIS, AFMC, 2010.



# Data Frame:

## Who applies to and who enters MD programs

MD Program Applicants Per 100,000 Population Aged 20-24 Years, by Sex, Canada, 1980/81-2006/07



Source: ORIS, AFMC, 2010.

Note: Male and female applicant rates are expressed in relation to the male and female population.

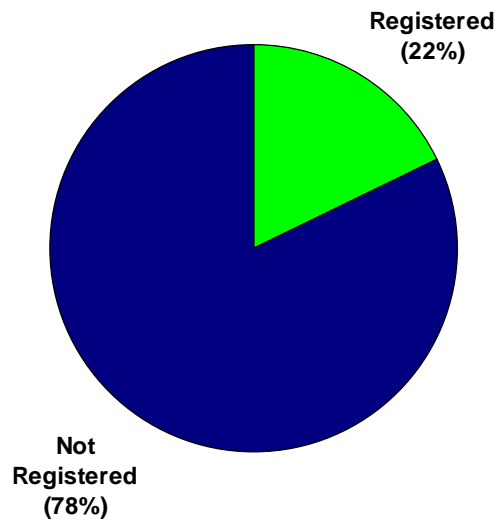


# Data Frame:

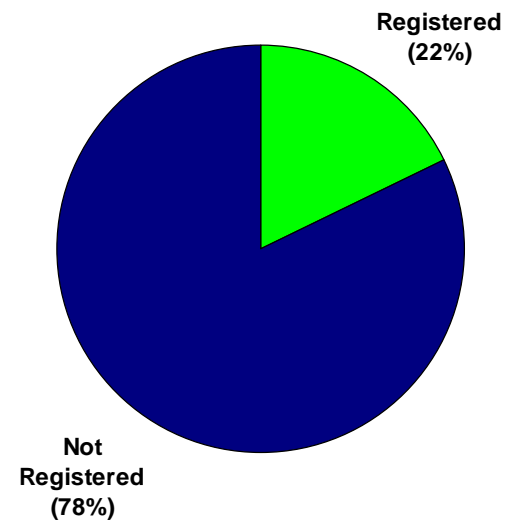
Who applies to and who enters MD programs

## Percentages of 2007-08 MD Program Applicants Who Were Registered and Not Registered

### MALES



### FEMALES



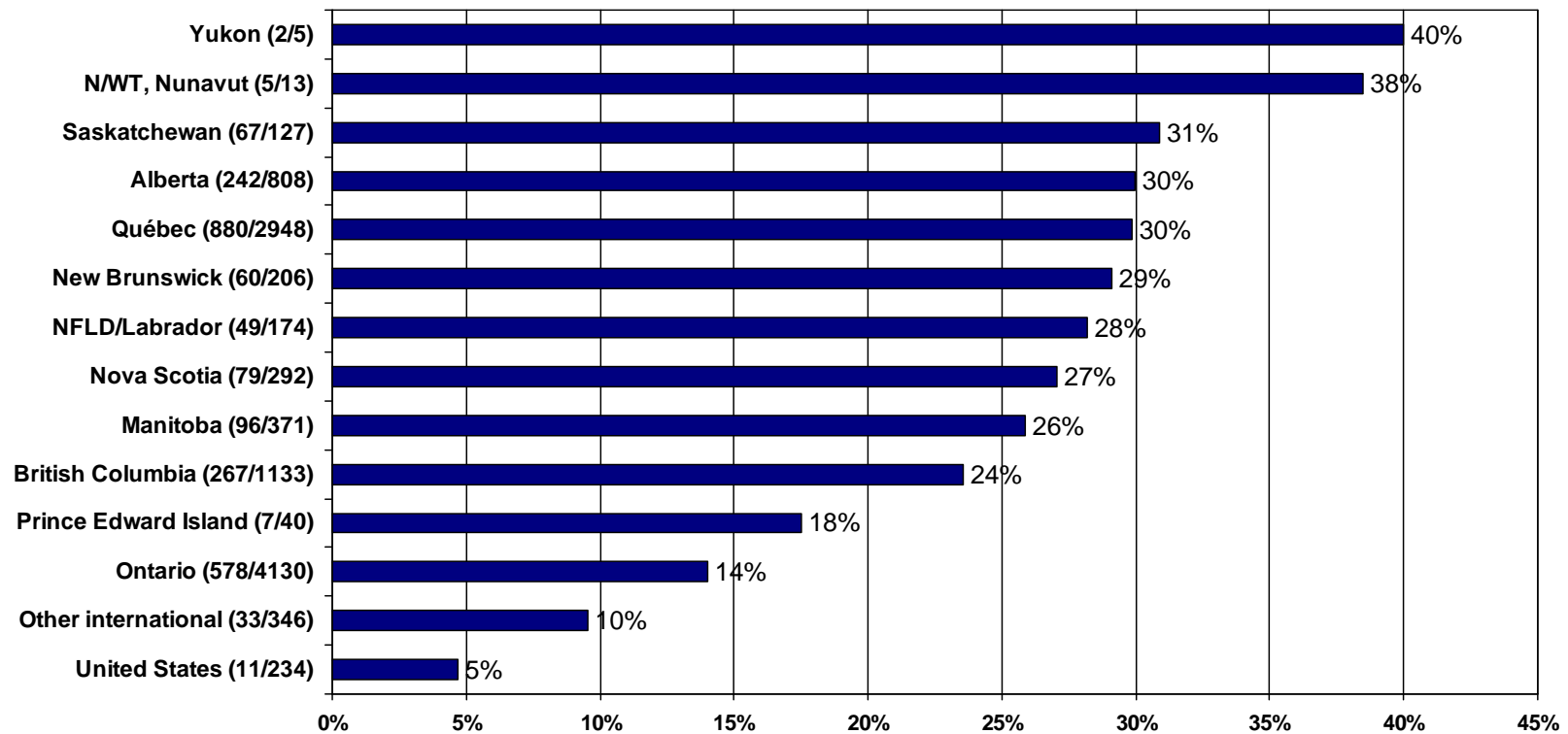
Source: ORIS, AFMC, 2010.



# Data Frame:

## Who applies to and who enters MD programs

**MD Program Acceptance Rates by Province/Country of Residence of Applicants, Canada, 2007-08**



Source: ORIS, AFMC, 2010.

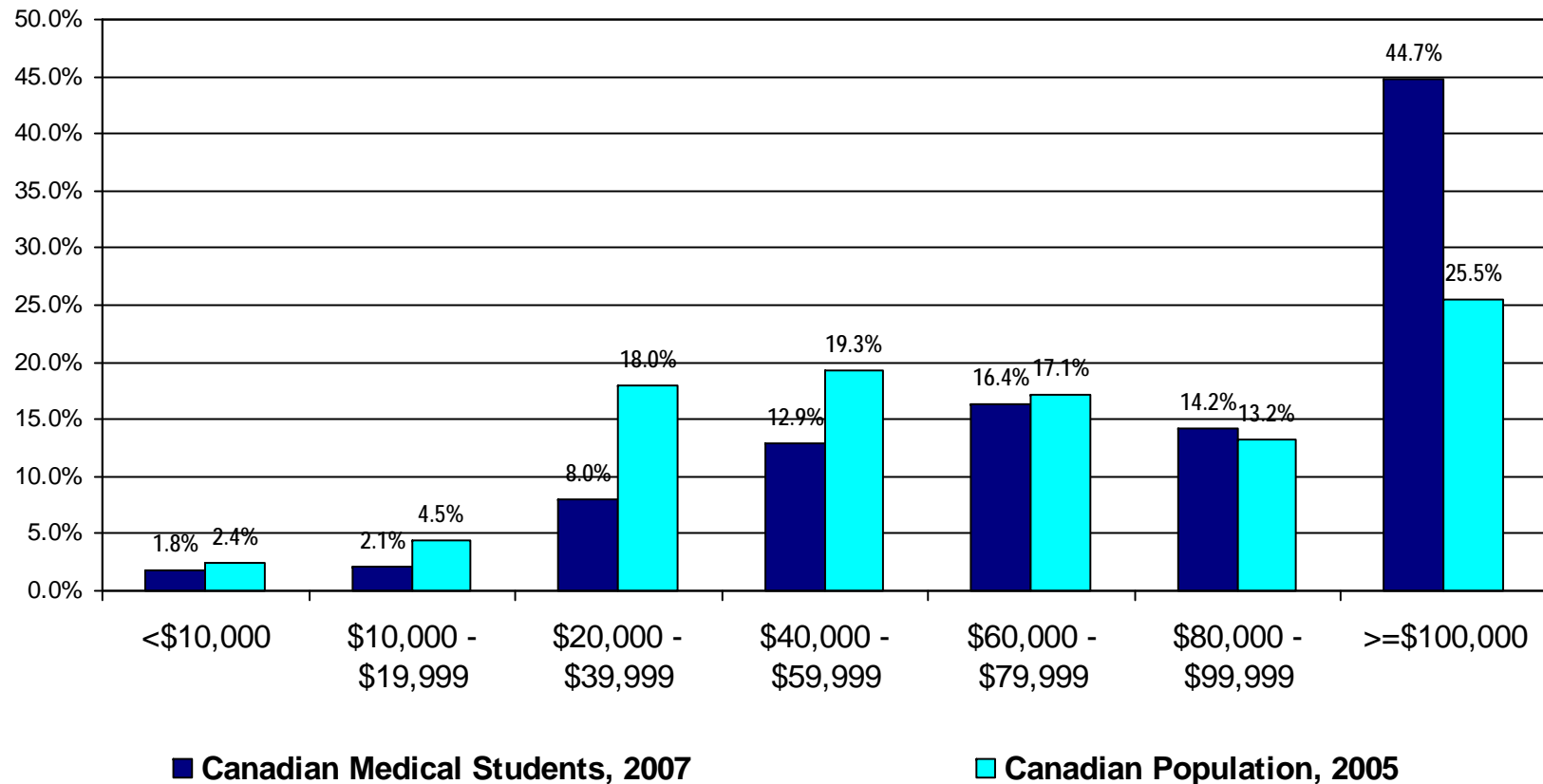




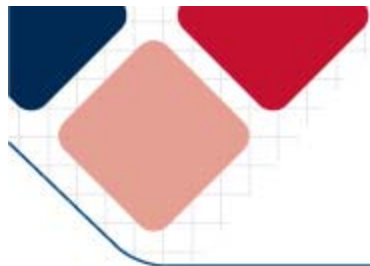
# Data Frame:

## Who applies to and who enters MD programs

**Annual Income Distribution of Canadian Families and the Families of Canadian Medical Students**



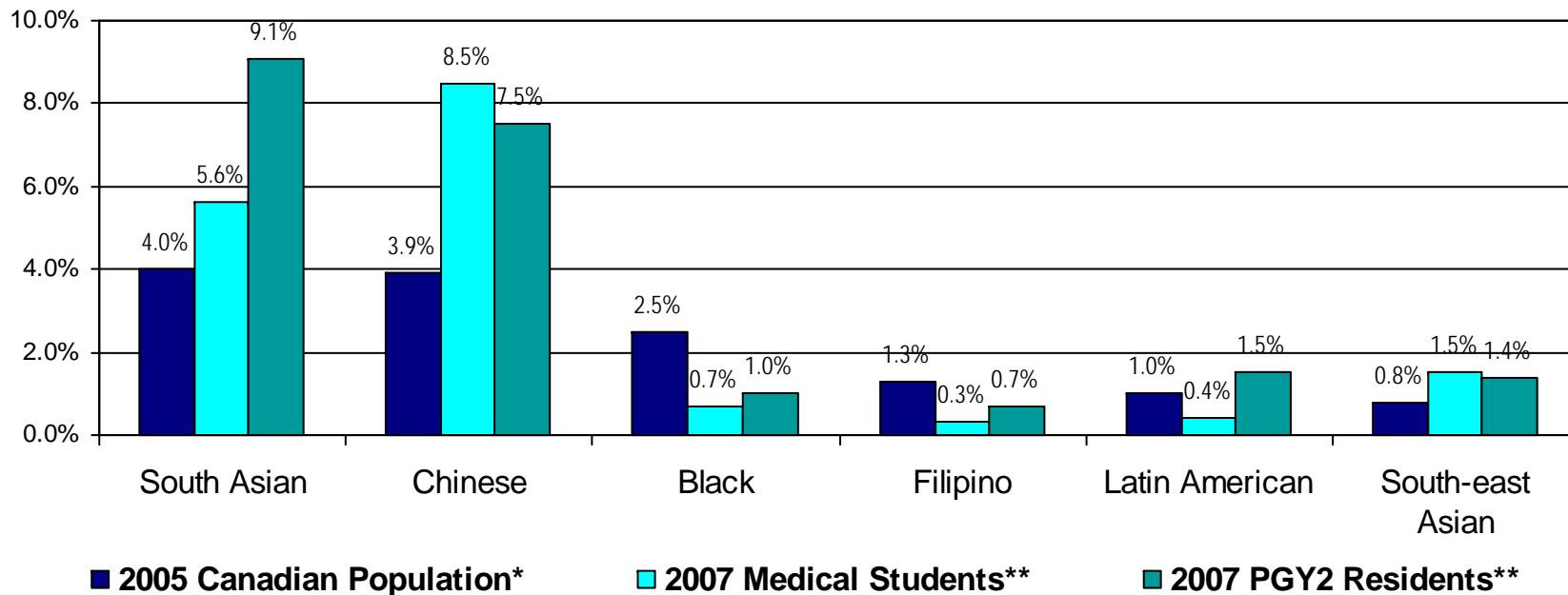
Sources: 2007 National Physician Survey: Medical Student Questionnaire. College of Family Physicians of Canada, Canadian Medical Association, Royal College of Physicians and Surgeons of Canada; Statistics Canada - 2006 Census. Catalogue Number 97-563-XCB2006018.



# Data Frame:

## Who applies to and who enters MD programs

**Visible Minority Groups Among Medical Students, Year 2  
Postgraduate Medical Trainees and the General Population, Canada**



\* Statistics Canada, censuses of population, 2006; \*\* 2007 National Physician Survey. The College of Family Physicians of Canada, Canadian Medical Association, The Royal College of Physicians and Surgeons of Canada.

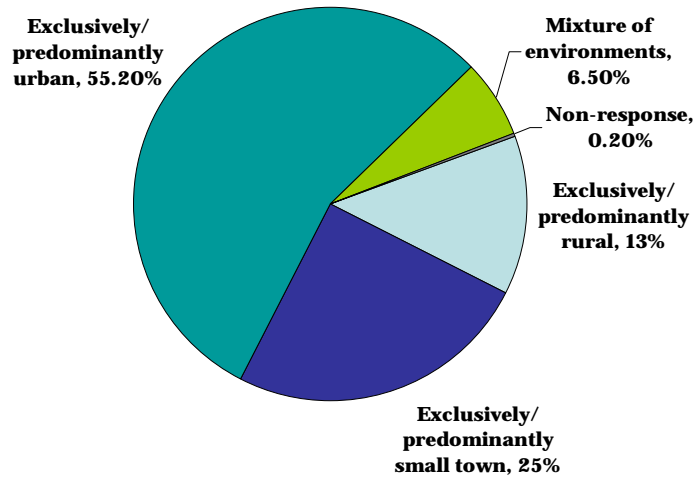
Note: The Employment Equity Act defines visible minorities as 'persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.' South Asian includes, for example, 'East Indian,' 'Pakistani,' 'Sri Lankan,' etc. South-east Asian includes, for example, 'Vietnamese,' 'Cambodian,' 'Malaysian,' 'Laotian,' etc.



# Data Frame:

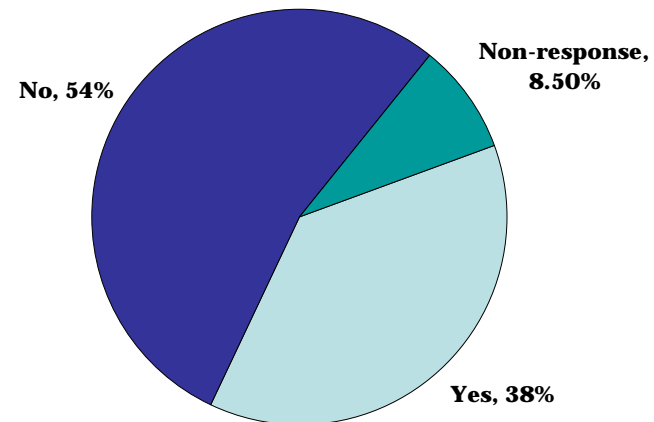
## Who applies to and who enters MD programs

**Where did you grow up?**



**Medical Student Responses to the 2007 National Physician Survey**

**Are immediate family members medical workers?**



Source: 2007 National Physician Survey: Medical Student Questionnaire. College of Family Physicians of Canada, Canadian Medical Association, Royal College of Physicians and Surgeons of Canada.



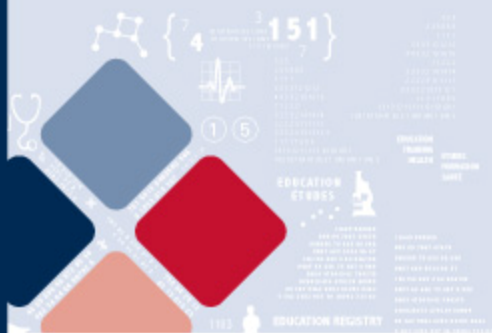
# Questions

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- Are there certain diversity characteristics that are not reflected adequately among medical students/trainees?
- What diversity characteristics would we like to see data for? SES? Ethnicity? Geographic origin? Sexual orientation?
- How do we better measure the applicant pool?

# Capacity Crunch:

How are faculties of medicine responding to increased enrolment?





# Data Frame:

## Responding to increased enrolment



- **FA-2.** There must be a sufficient number of faculty members in the subjects basic to medicine and in the clinical disciplines to meet the needs of the educational program. (LCME-CACMS Accreditation Criteria)
- **FMEC Recommendation VI: Diversify Learning Contexts**
  - ...physicians practise in a wide range of settings...In order to prepare physicians for these realities, Faculties of Medicine must provide learning experiences...in a variety of settings, ranging from small rural communities to complex tertiary health care centres.
- **FMEC Enabling Recommendation E: Enhance Faculty Development**
  - ...teaching, research, and leadership are core roles for physicians...priority must be given to faculty development, support, and recognition in order to enable teachers and learners

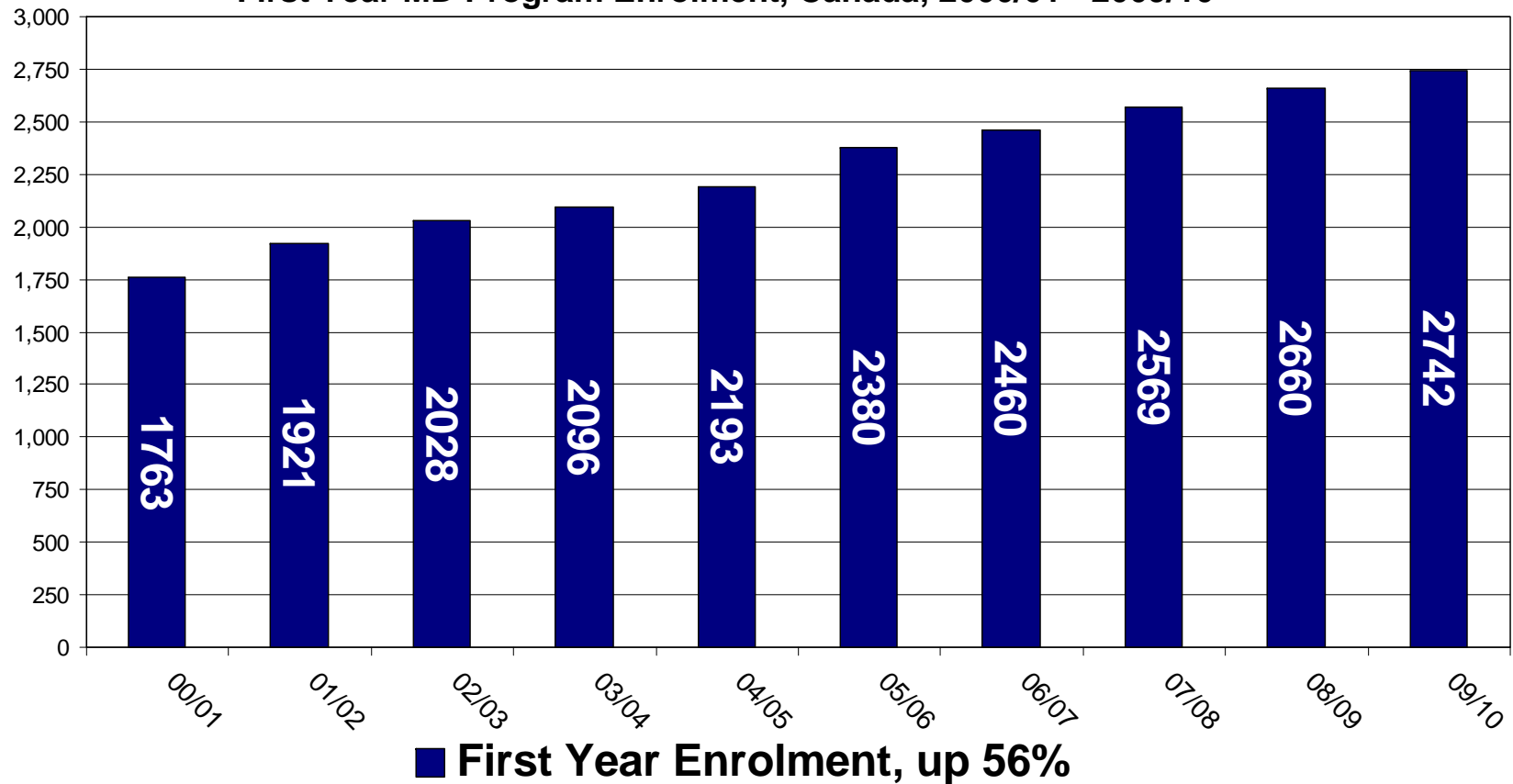


# Data Frame:

## Responding to increased enrolment



First Year MD Program Enrolment, Canada, 2000/01 - 2009/10

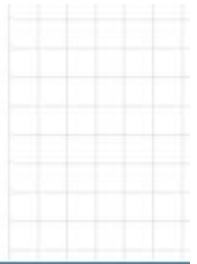


Source: ORIS, AFMC, 2010

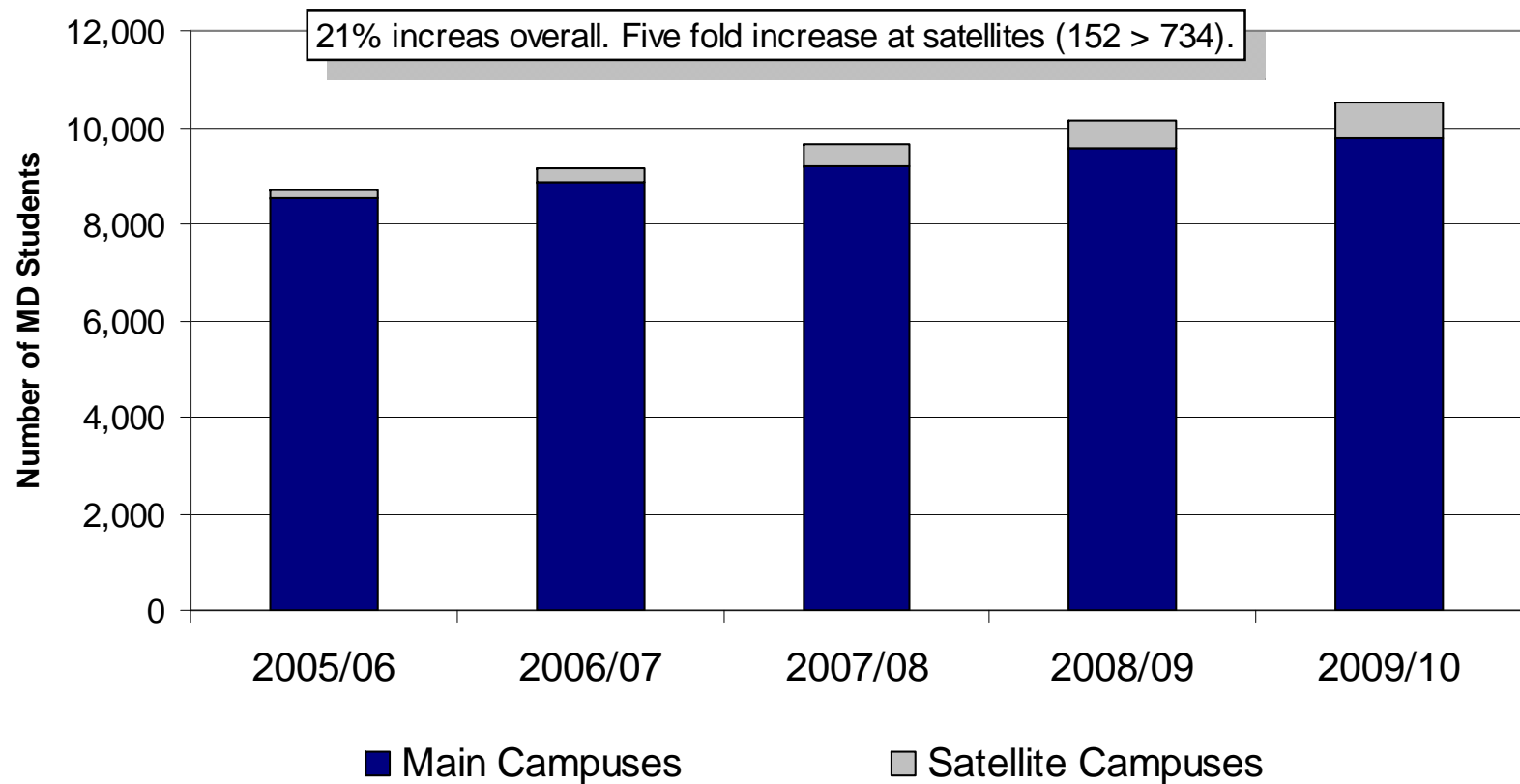


# Data Frame:

## Responding to increased enrolment



MD Program Enrolment by Site, Canada, 2005/06 - 2009/10



Source: ORIS, AFMC, 2010.



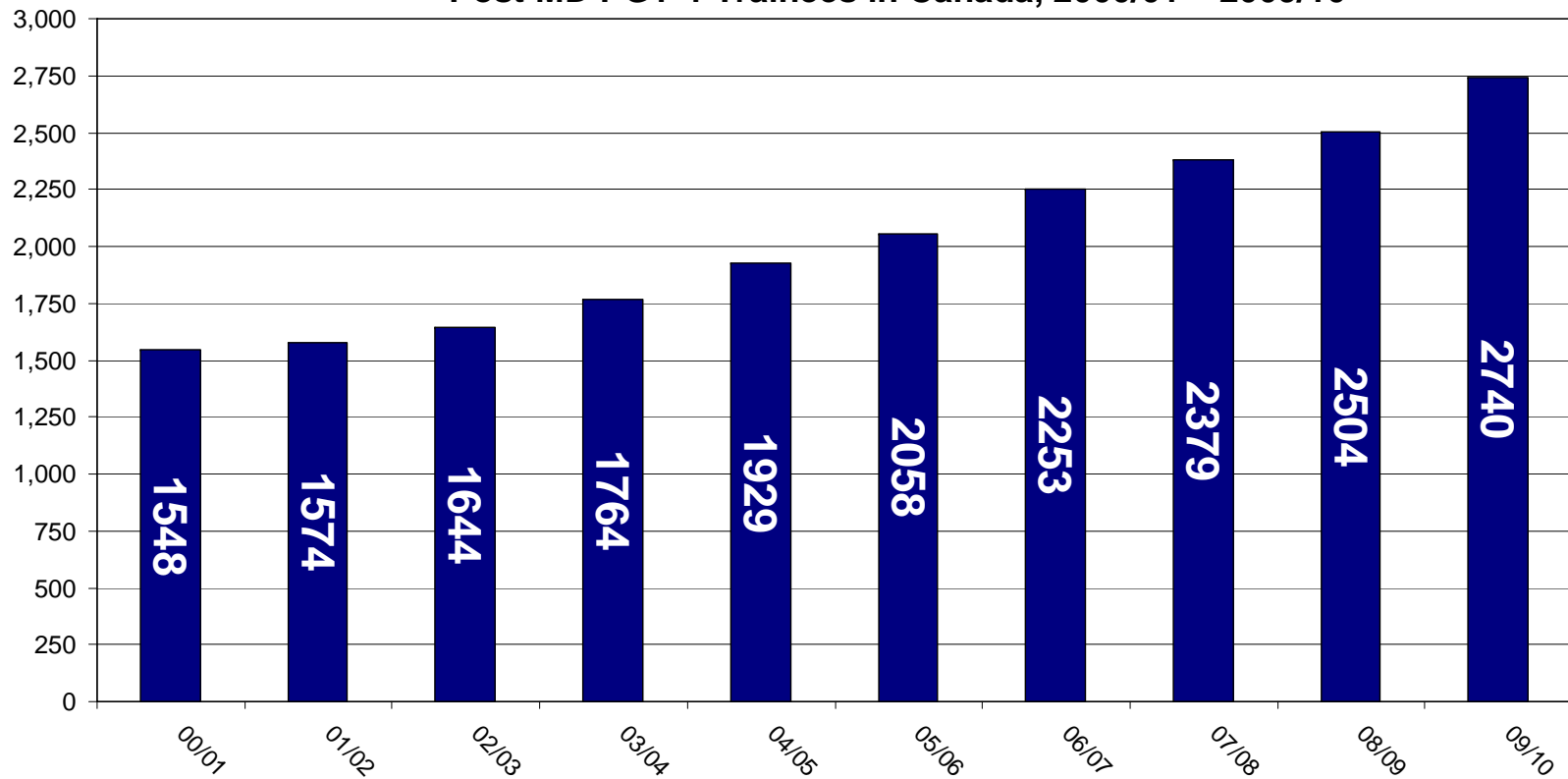


# Data Frame:

## Responding to increased enrolment



Post-MD PGY-1 Trainees in Canada, 2000/01 – 2009/10



Source: CAPER, AFMC, 2010

Note: Visa trainees are excluded.

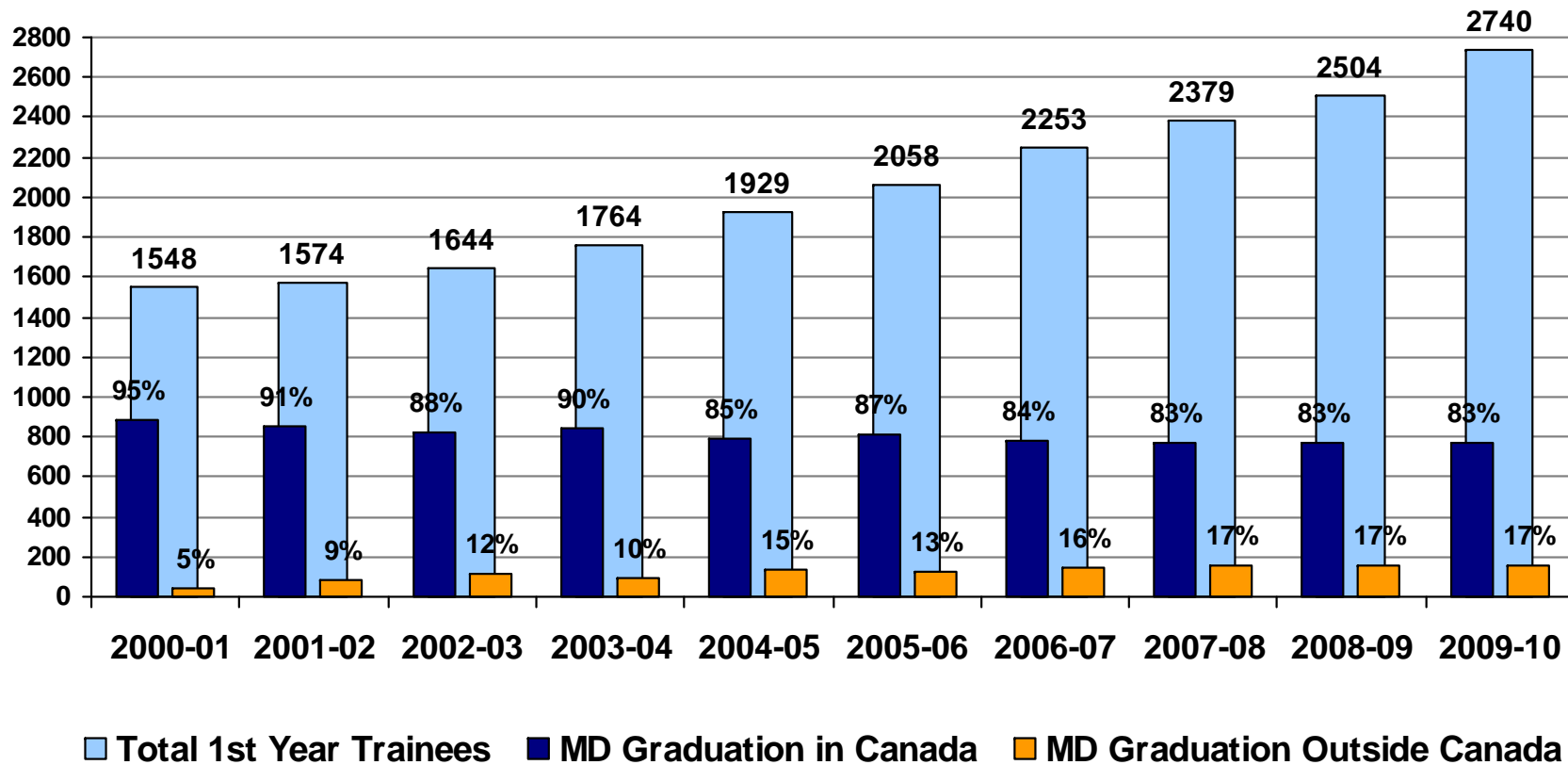
■ PGY-1 Residents, up 77%



# Data Frame:

## Responding to increased enrolment

First Year Post-M.D. Trainees by Place of MD Graduation, 2000-01 to 2009-10



Source: CAPER, AFMC, 2010. Note: Visa trainees not included.

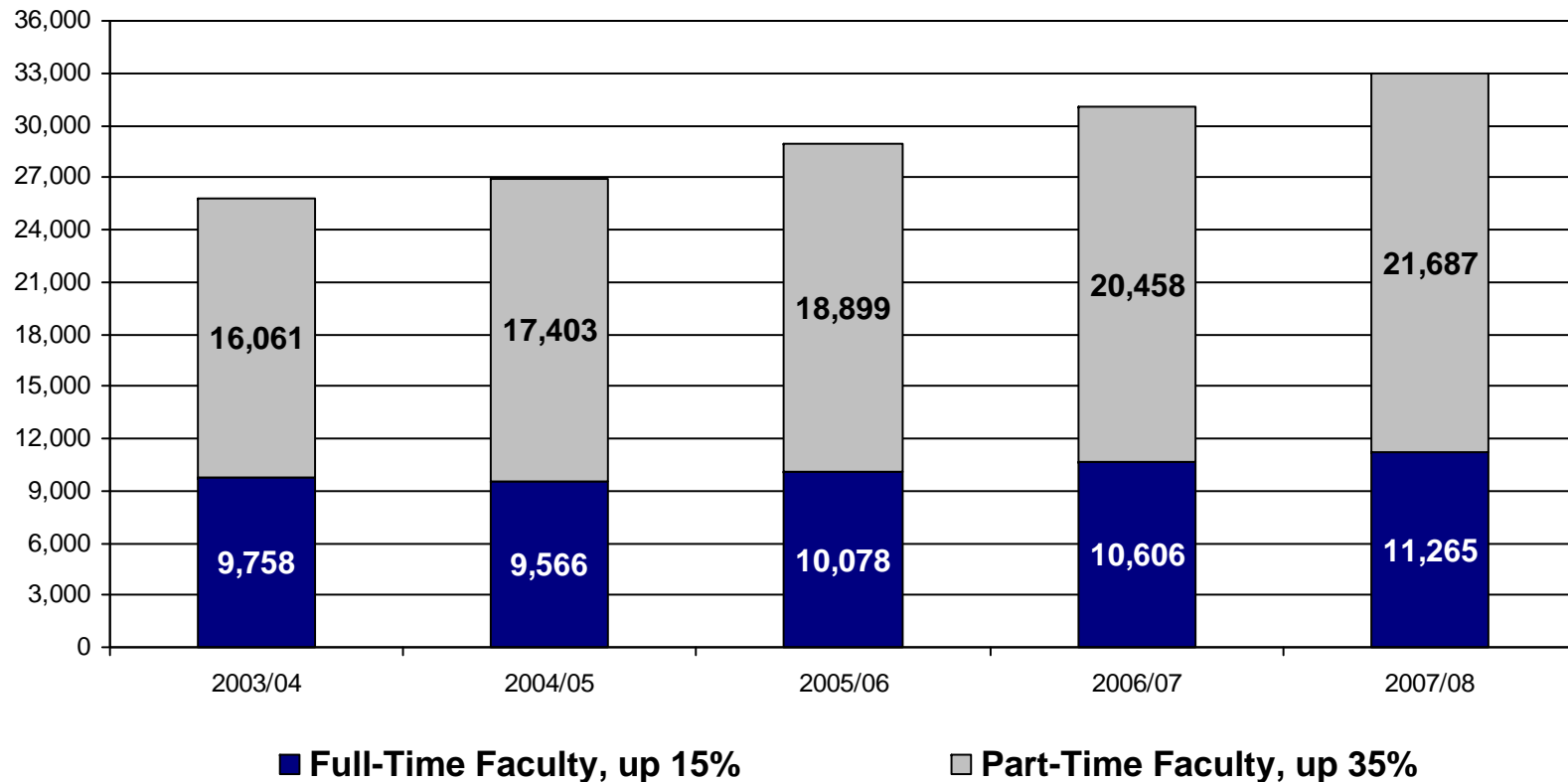


# Data Frame:

## Responding to increased enrolment



**Faculty of Medicine Faculty Counts, Canada, 2003-04 to 2007-08**



Source: AFMC ORIS, 2009.

Note: Full-time faculty include professors, associate and assistant professors, instructors and other faculty. Part-time faculty includes paid and volunteer faculty members.

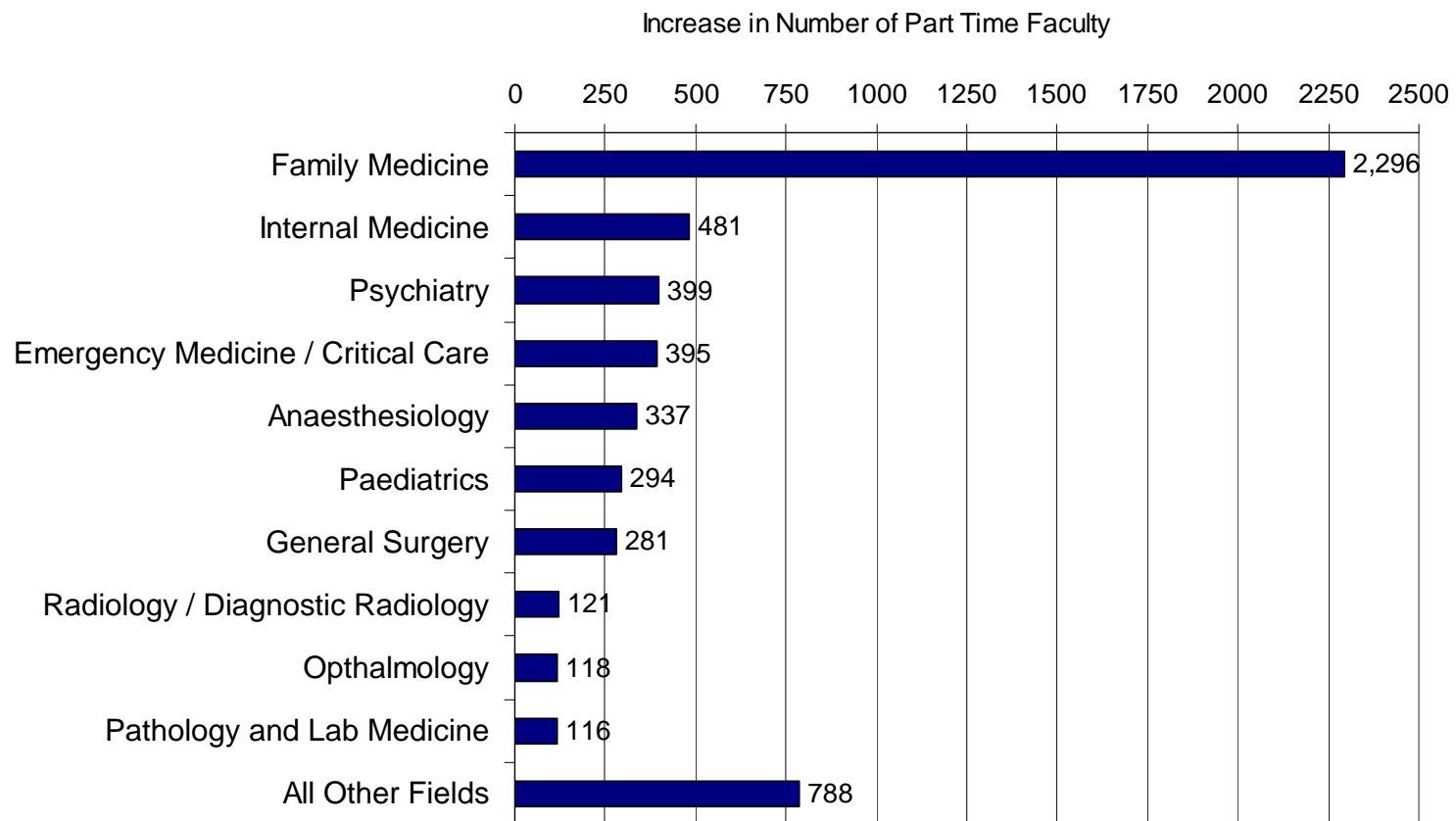


# Data Frame:

## Responding to increased enrolment



**Increase in Part Time Faculty of Medicine Faculty, Canada,  
2003/04 to 2007/08**

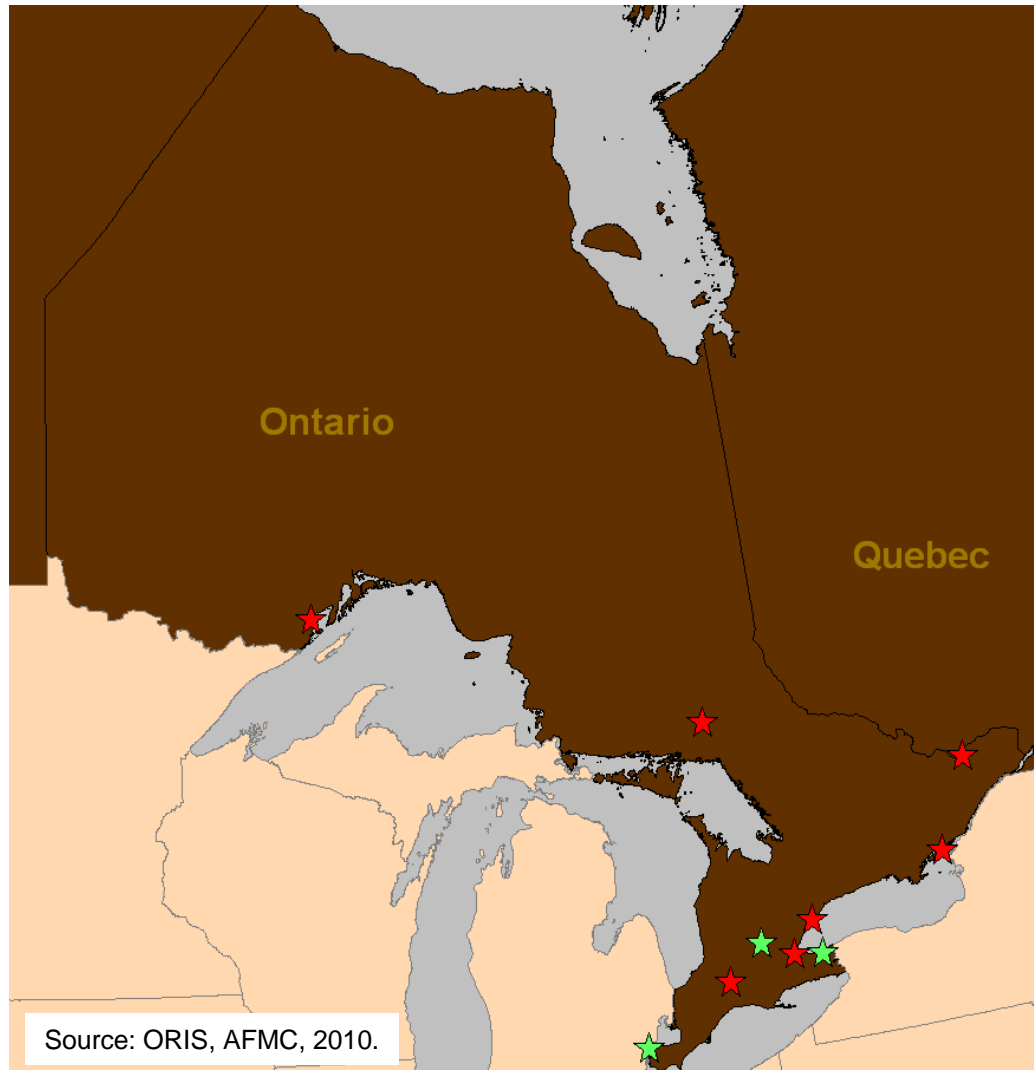


Source: AFMC, ORIS, 2009.



# Data Frame:

## Responding to increased enrolment



***Ontario has seven main medical campuses and three satellite campuses...***

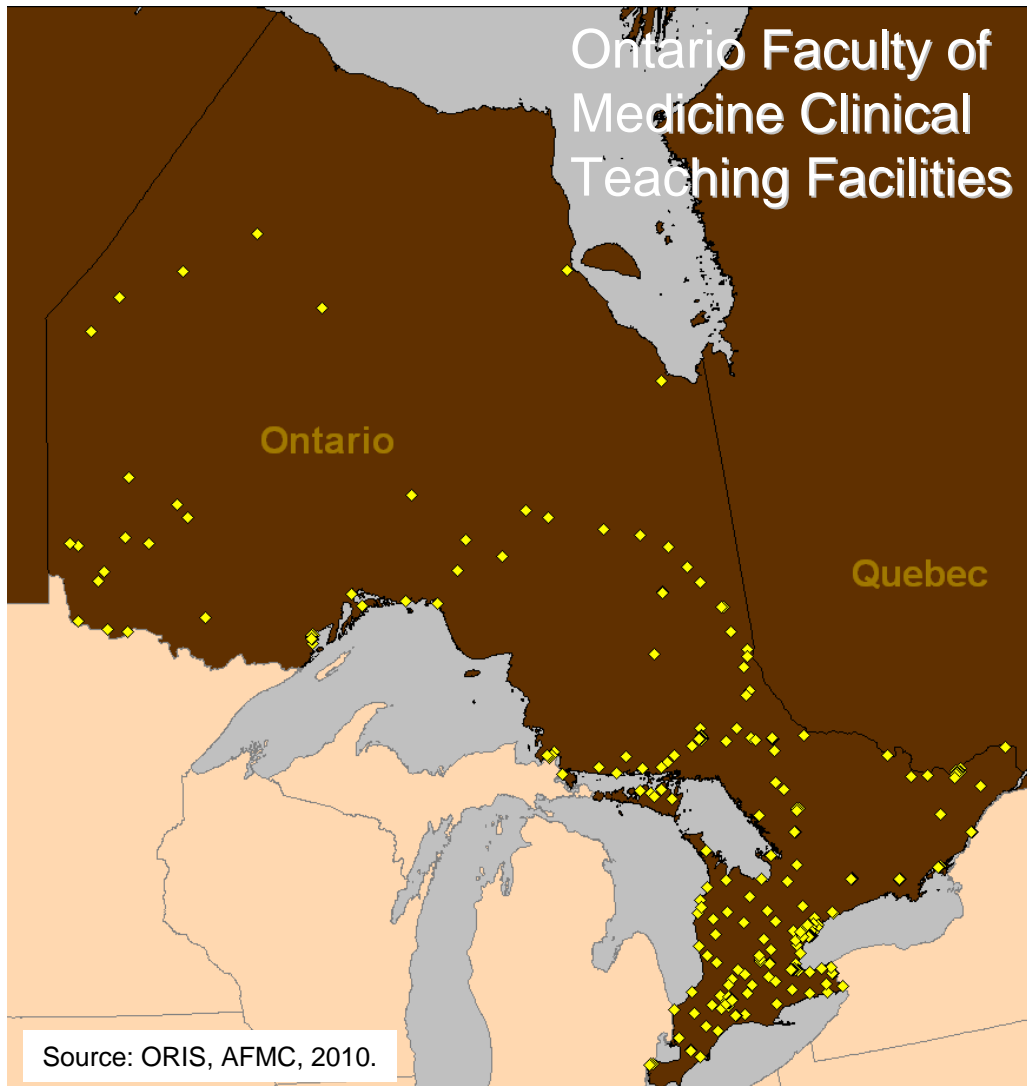
★ Main Campus

★ Satellite Campus



# Data Frame:

## Responding to increased enrolment



*...but medical education happens in many places.*

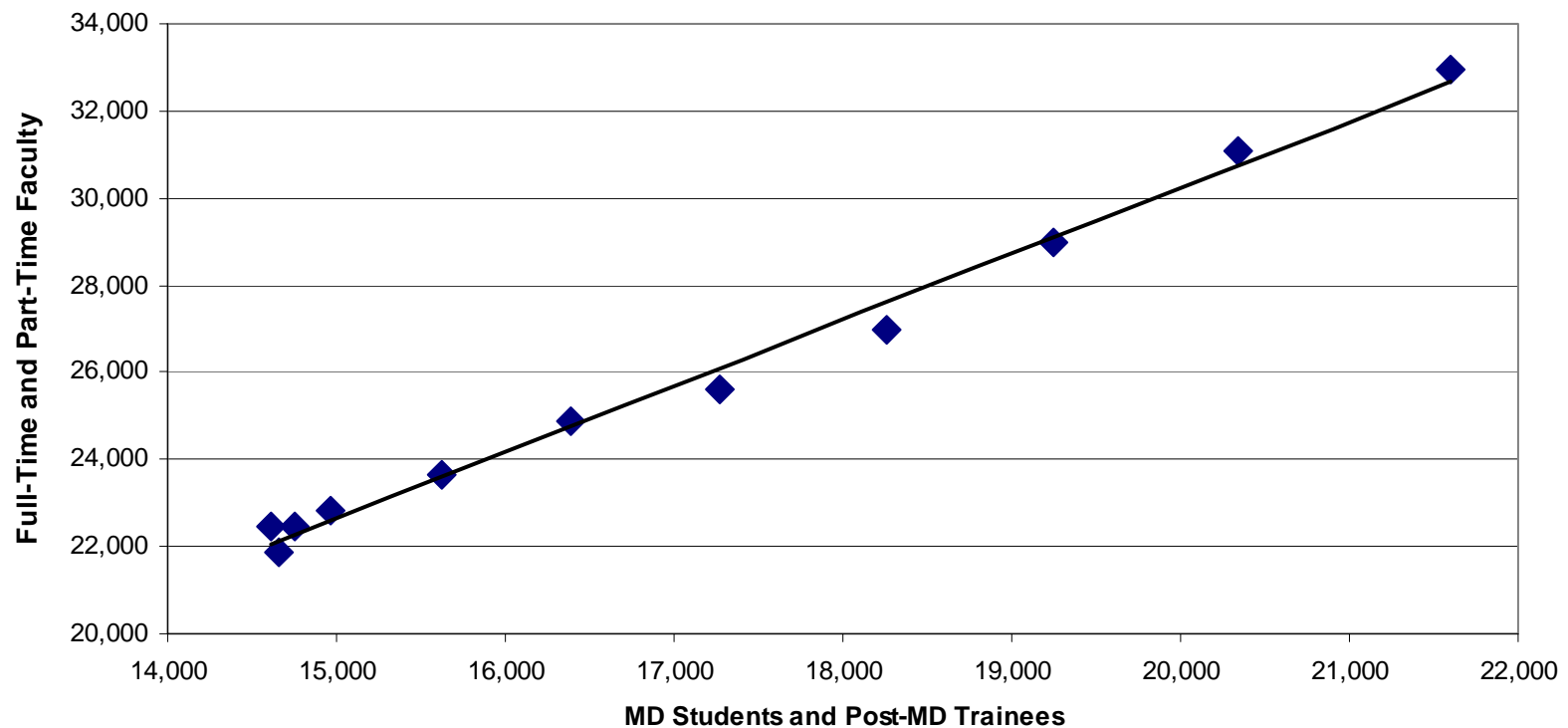


# Data Frame:

## Responding to increased enrolment



**Faculty of Medicine Full- and Part-Time Faculty and MD Students and Post-MD Trainees, Canada, 1997/98 - 2007/08**



Sources: CAPER-ORIS, AFMC, 2010.

Note: Data points plot annual faculty of medicine full- and part-time faculty counts against MD student and Post-MD trainee counts between 1997/98 and 2007/08. Each data point plots the counts for these two dimensions for a particular year.



# Questions



- After accounting for part- and full-time faculty, do we have an adequate number of medical teachers and preceptors?
- Are medical students/residents receiving an adequate number, type and quality of clinical experiences?



# On the Move:

## Taking an upstream view of physician mobility





# Data Frame

An upstream view of physician mobility

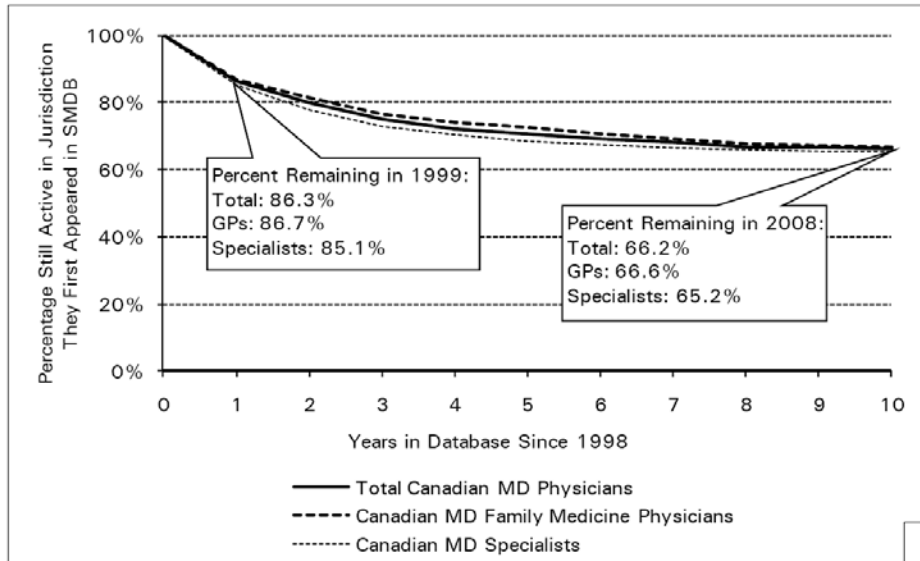
- Governments invest in educating and remunerating physicians
- Faculties of medicine work to develop and deliver high quality medical curricula
- Medical students and residents go where they must to achieve their career goals
- A variety of recent developments will ease physician mobility within Canada. For example:
  - Agreement on Internal Trade (AIT) Chapter 7: “Any qualified worker...must be granted access to similar employment opportunities in any other Canadian jurisdiction.”
  - Pan-Canadian Framework for the Assessment and Recognition of Foreign Qualifications: “Collaboration among governments and between governments and regulatory authorities...with the goal of ensuring a coherent system for determining recognition of qualifications”
  - National Assessment Collaboration, National Registration, Physician Credentials Registry of Canada



# Data Frame

An upstream view of physician mobility

Canadian-Trained Physicians

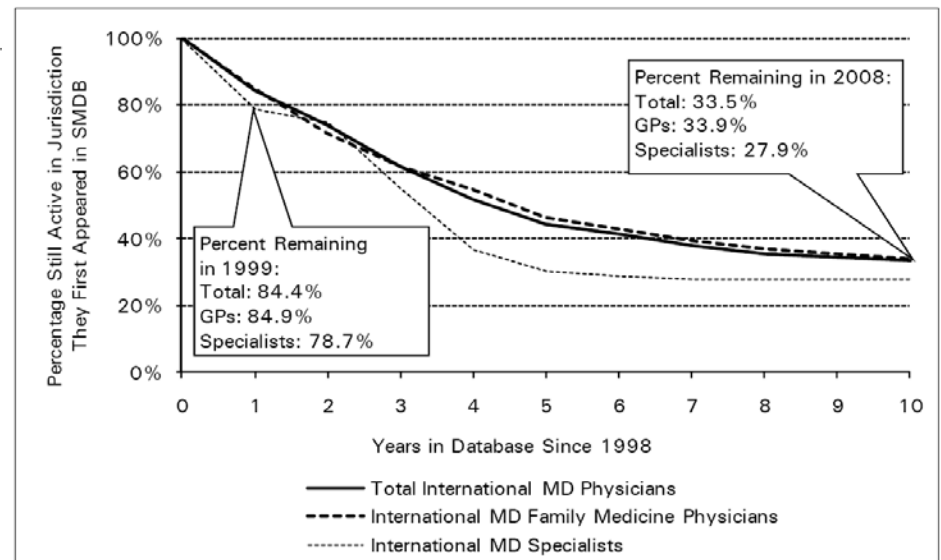


**Percent of Physicians Newly-Registered in 1998 Who Are Still Active in Their 1998 Province/Territory in 2008**

Source: SMDB, CIHI, 2009.

***Physicians have been mobile in the past. How much more mobile will they become?***

Internationally Trained Physicians





# Data Frame

An upstream view of physician mobility



*Attention on physician mobility has focused on later-stage measures.*

*In fact, the story begins much earlier...*

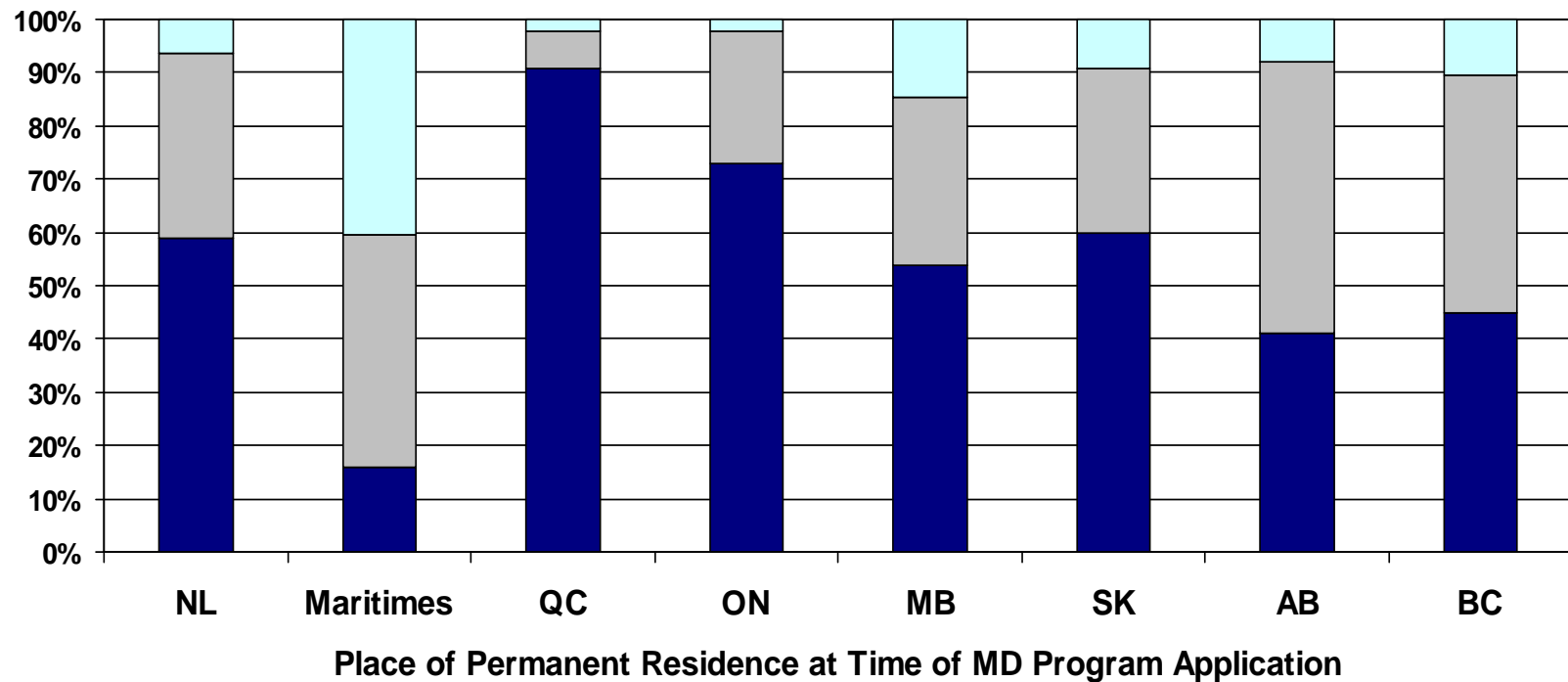


# Data Frame

## An upstream view of physician mobility



Provinces to Which MD Program Applicants Submitted Applications in 2008, by Province/Region of Applicants Permanent Residence



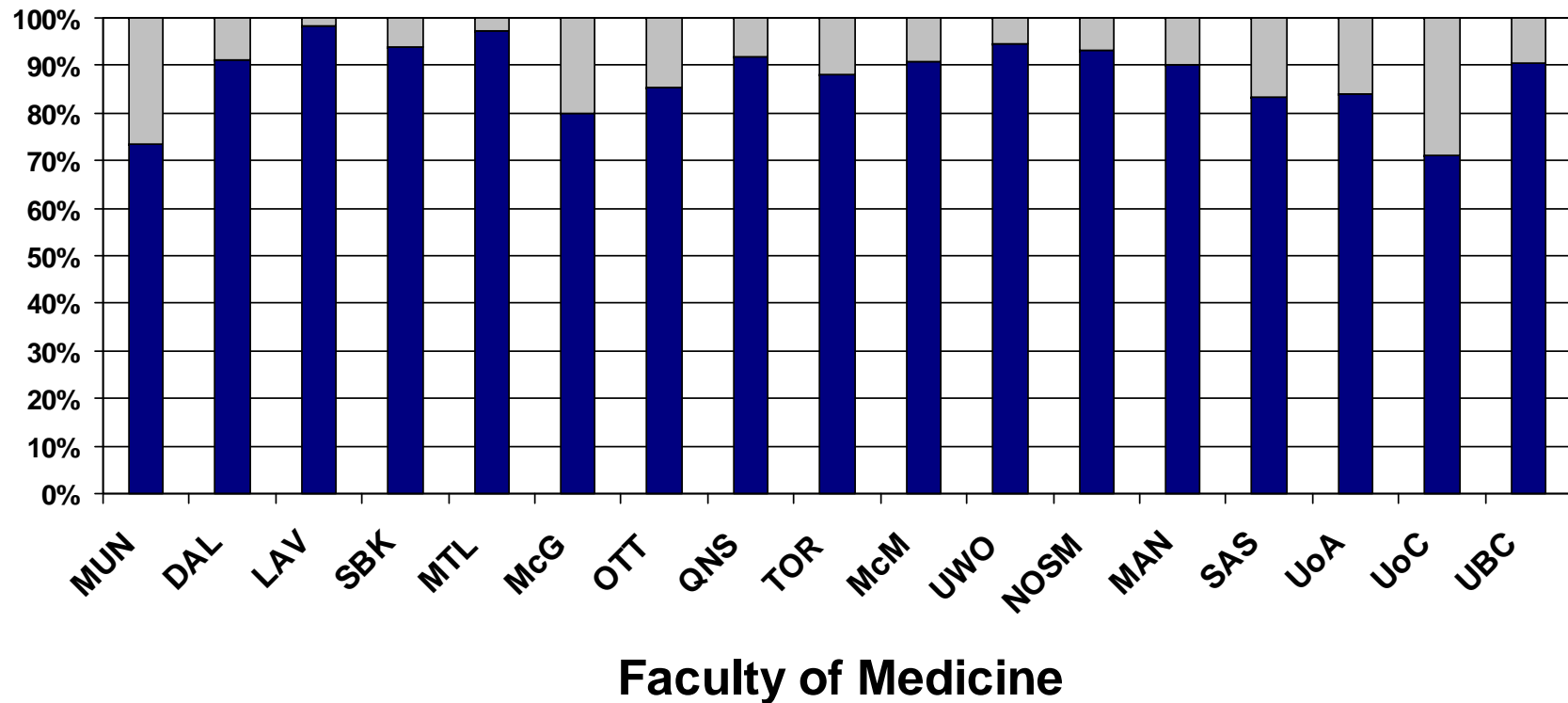
■ Applied only within province    ■ Applied within and outside province    ■ Applied only outside province



# Data Frame

## An upstream view of physician mobility

Province/Region of Permanent Residence of 1st Year Medical Students,  
by Faculty of Medicine, 2008-09



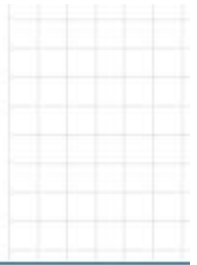
■ Permanent resident of Faculty province/region    □ Permanent resident outside Faculty province/region\*

\* Includes 19 students with permanent residence outside of Canada. Source: ORIS, AFMC, 2010.

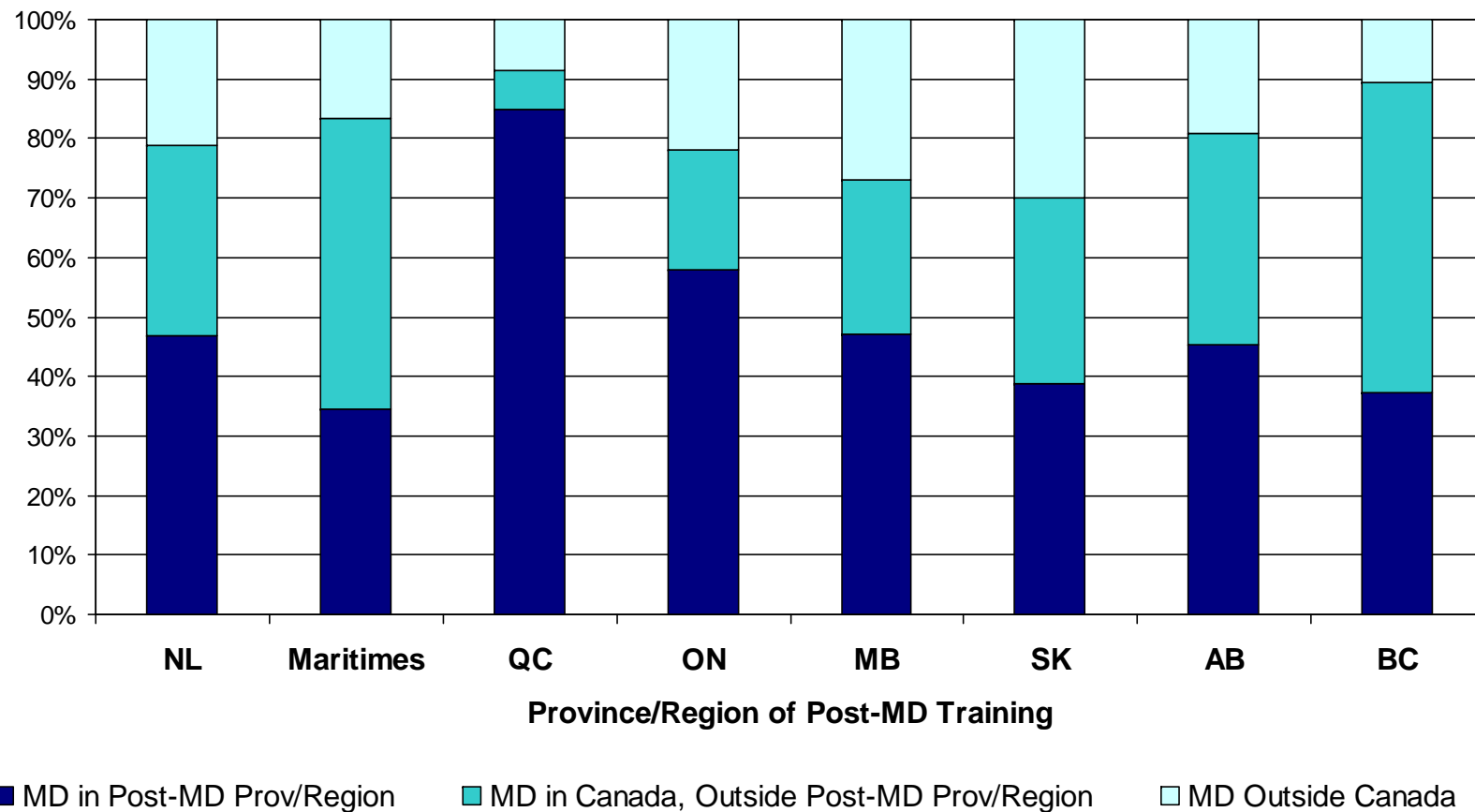


# Data Frame

## An upstream view of physician mobility



Place of MD Graduation by Current Place of Post-MD Training, 2009-10

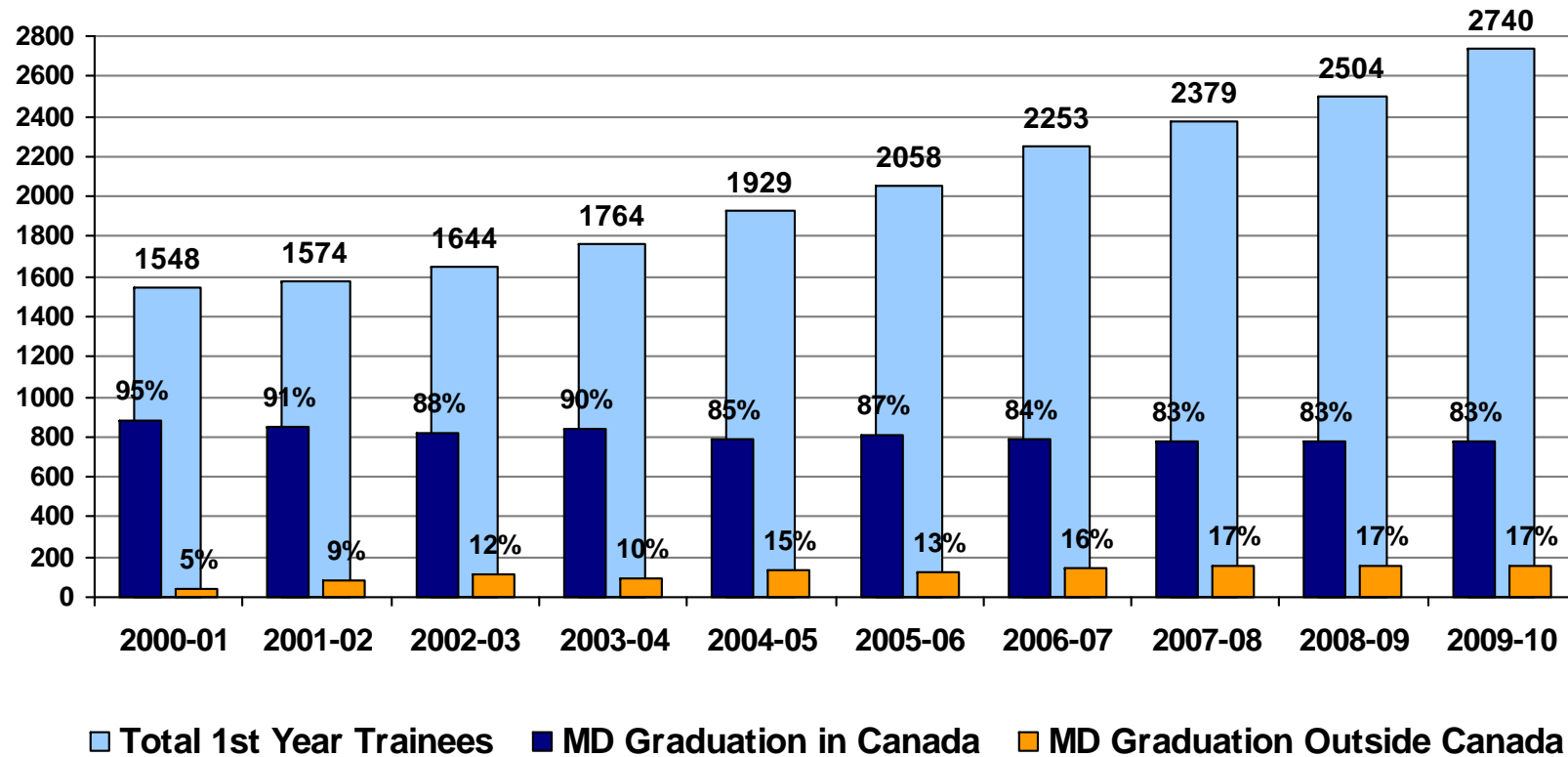


Source: CAPER, AFMC, 2010. Note: Visa trainees not included.

# Data Frame

## An upstream view of physician mobility

First Year Post-M.D. Trainees by Place of MD Graduation, 2000-01 to 2009-10



Source: CAPER, AFMC, 2010. Note: Visa trainees not included.



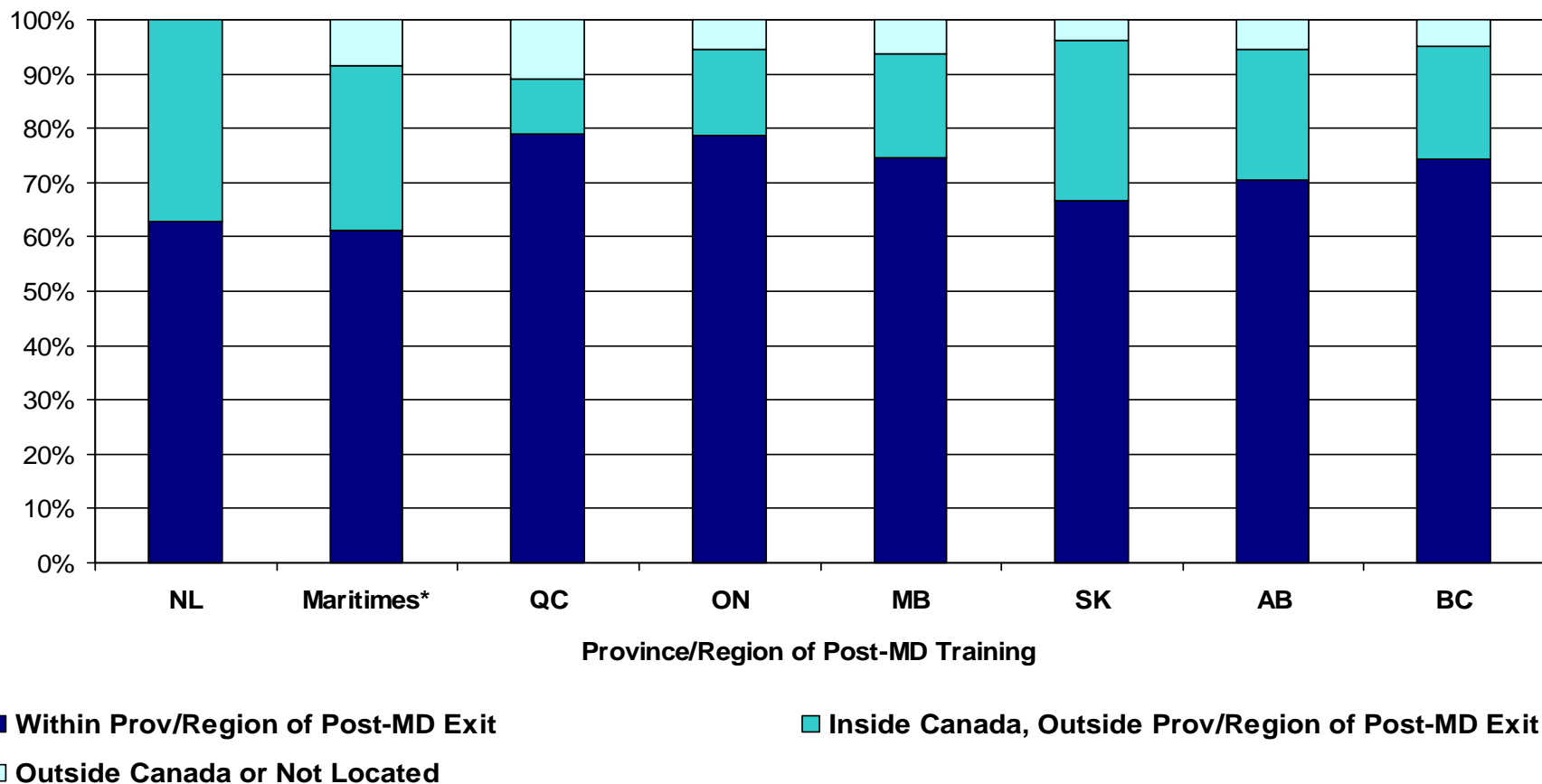


# Data Frame

## An upstream view of physician mobility



**2009 Practice Location of Post-MD Trainees Who Exited Training in 2007  
(Practice Location 2 Years Later)**

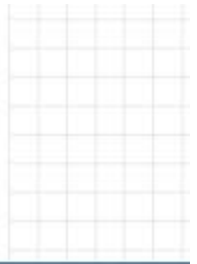


\*Includes Dalhousie post-MD graduates practising in PEI, Nova Scotia and New Brunswick; Source: CAPER, AFMC, 2010.

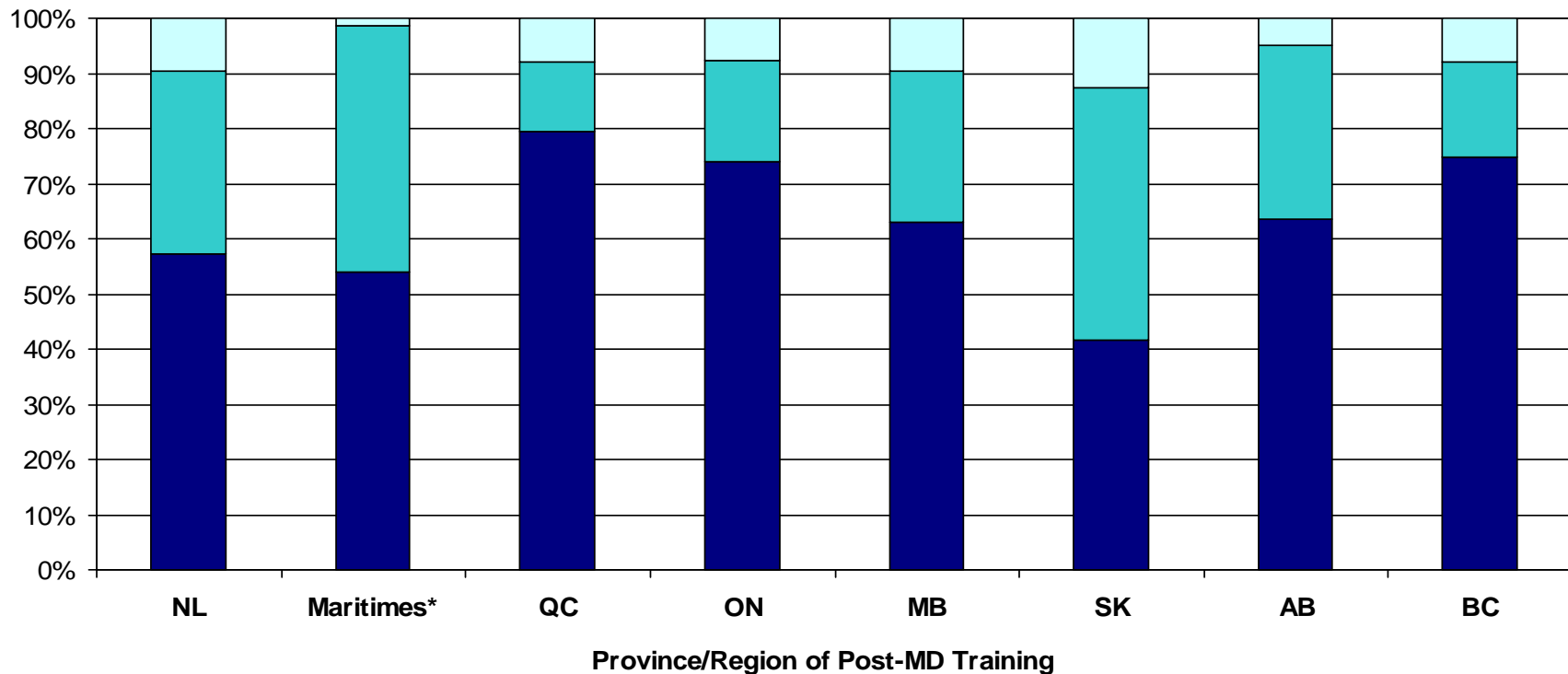


# Data Frame

## An upstream view of physician mobility



**2009 Practice Location of Post-MD Trainees Who Exited Training in 2004  
(Practice Location 5 Years Later)**



■ Within Prov/Region of Post-MD Exit

■ Inside Canada, Outside Prov/Region of Post-MD Exit

■ Outside Canada or Not Located

\*Includes Dalhousie post-MD graduates practising in PEI, Nova Scotia and New Brunswick. Source: CAPER, AFMC, 2010.



# Data Frame

An upstream view of physician mobility



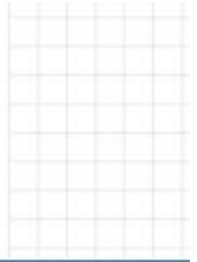
## Working Definitions: Large Urban Centre, Small City, Town and Rural Place

- Large Urban Centres are census metropolitan areas with population of at least 100,000
- Small Cities are tracted census agglomerations with urban core population of 50,000 – 99,999
- Towns are untracted census agglomerations with urban core population of 10,000 – 49,999
- Rural Places are metro influenced zones outside of census metropolitan areas and census agglomerations, including the Territories

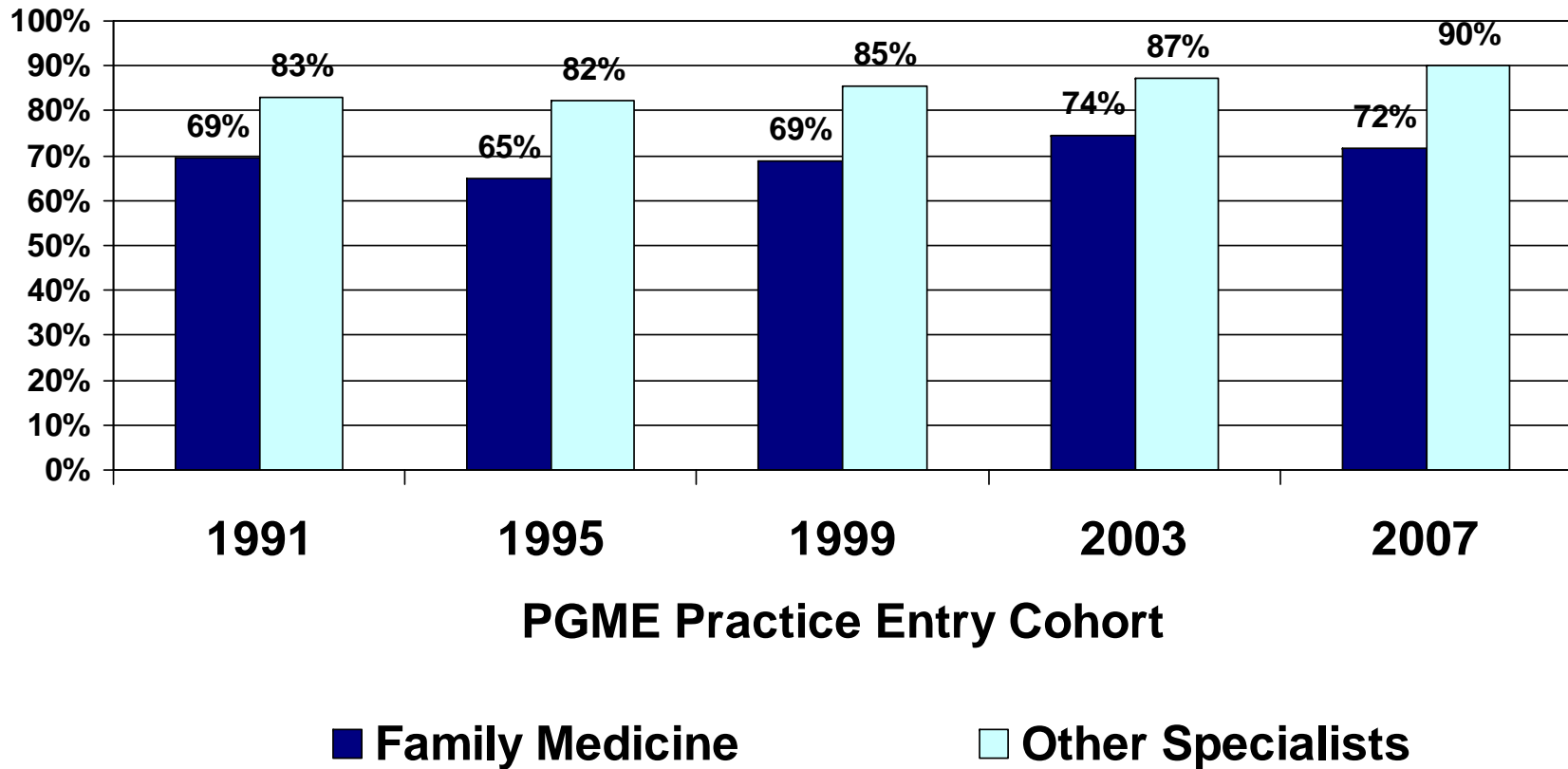


# Data Frame

An upstream view of physician mobility



Percent of Practice Entry Cohort in Large Urban Centres Two Years After Completion of Post-MD Training, 1991-2007



Source: CAPER, AFMC, 2010.

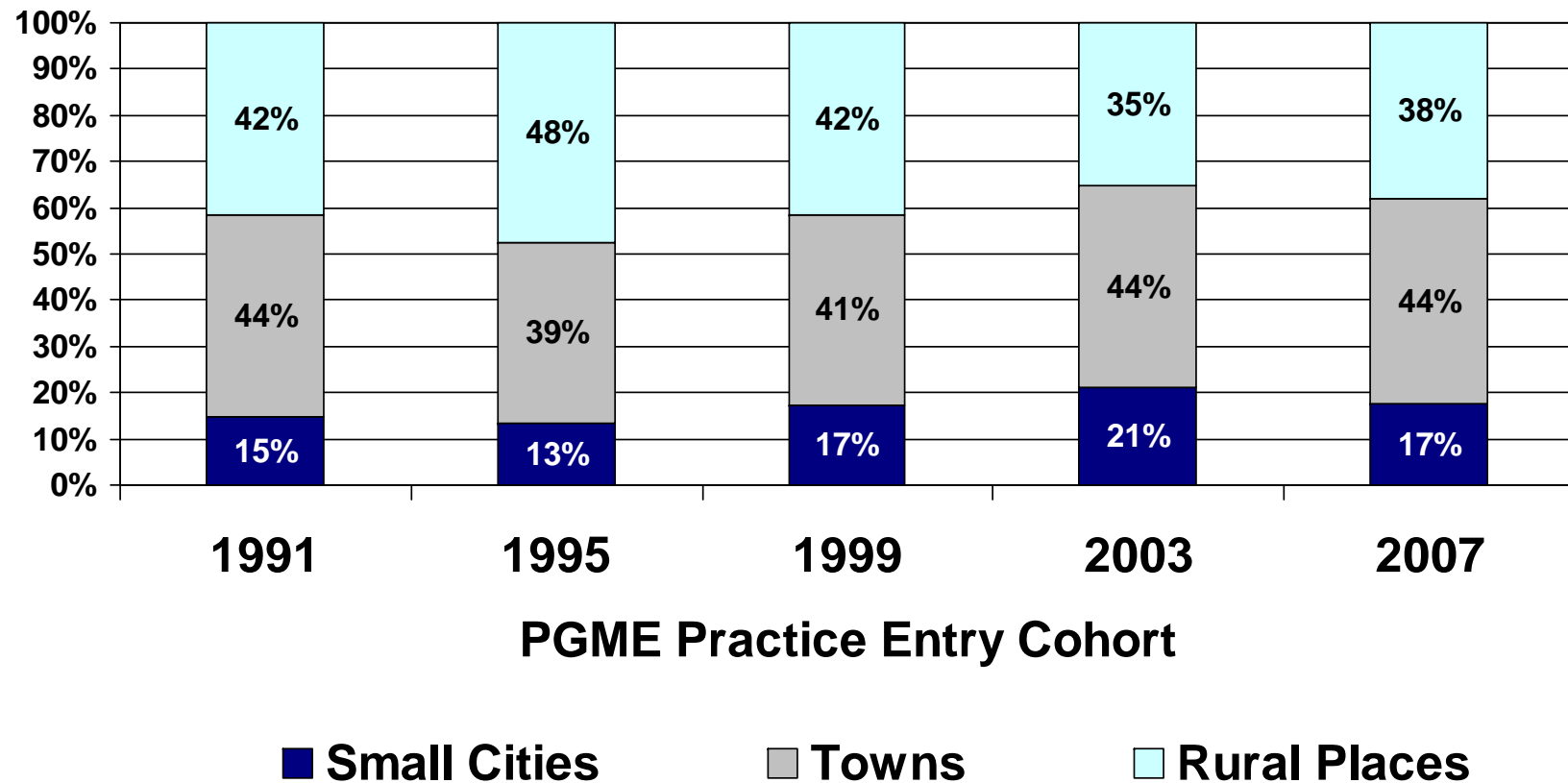


# Data Frame

An upstream view of physician mobility



Distribution of Practice Entry Cohorts Across Small Cities, Towns and Rural Places  
Two Years After Completion of Post-MD Training, 1991-2007



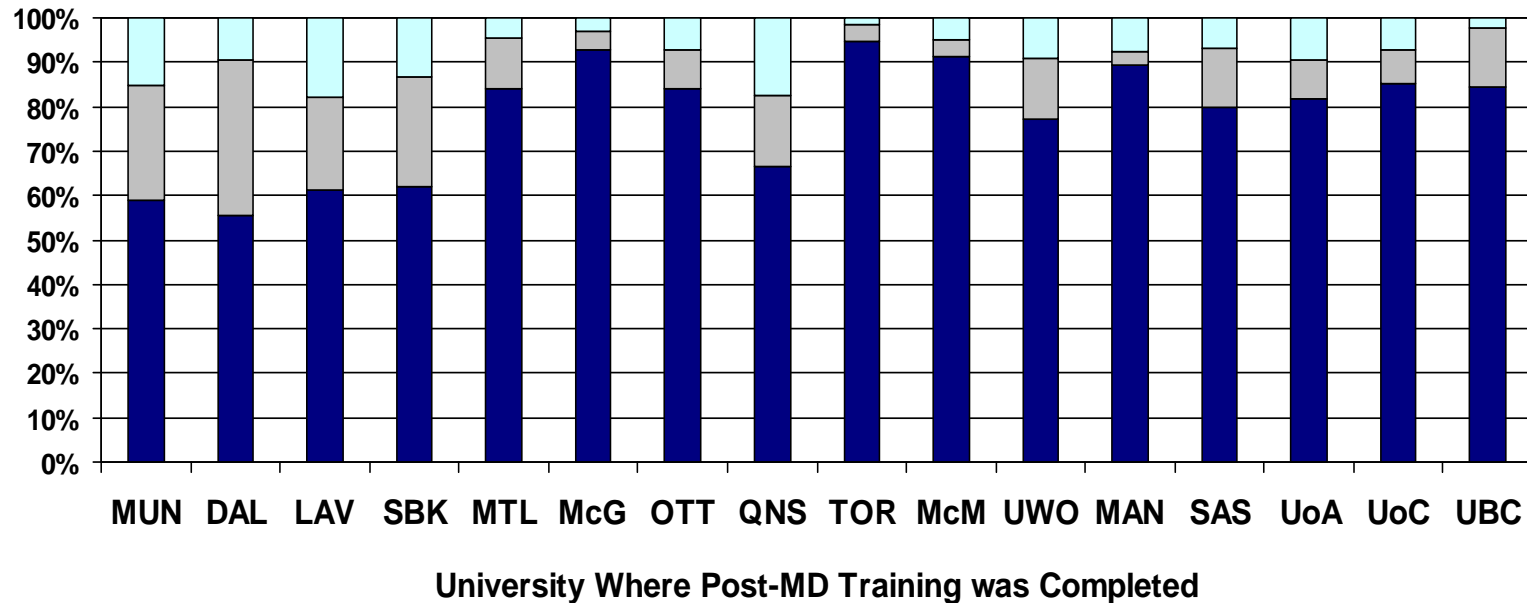
Source: CAPER, AFMC, 2010.



# Data Frame

## An upstream view of physician mobility

**Distribution of 2007 Practice Entry Cohort Across Large Urban Centres, Small Cities & Towns and Rural Places in 2009, by Faculty of Medicine Where Post-MD Training Was Completed**



Large Urban Centres
  Small Cities & Towns
  Rural Places

Source: CAPER, AFMC, 2010.



# Questions



- Did you know how mobile medical students and residents are during and following their education?
- How relevant is this information to Canada's broader discussion of physician supply and retention?