

# The Landscape of Community Medicine Residency Training in Canada: An Environmental Scan



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(March, 2005)

Prepared by Dr. Lori Kiefer for the Centre for Surveillance Coordination, PHAC

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## Table 1. Interviewees.

<b>National Specialty Society of Community Medicine</b>	Dr. Gerald Predy, 780-413-7600 Janet MacLachlan, 613-725-3769	<a href="mailto:gpredy@cha.ab.ca">gpredy@cha.ab.ca</a>	✓
<b>Royal College of Physicians &amp; Surgeons</b>	Allison Shaw, 613-730-8177 or 800-668-3740, x355 Dr. Richard Musto, (subcommittee)	<a href="mailto:ashaw@rcpsc.edu">ashaw@rcpsc.edu</a> <a href="mailto:Richard.Musto@CalgaryHealthRegion.ca">Richard.Musto@CalgaryHealthRegion.ca</a>	✓ ✓
<b>Residency Training Programs:</b>			
<b>English (12 positions):</b>			
<b>UBC (Vancouver) (2)</b>	Dr. Jane Buxton, 604-822-2772	<a href="mailto:jane.buxton@ubc.ca">jane.buxton@ubc.ca</a>	✓
<b>University of Alberta (Edmonton) (1)</b>	Dr. Gerald Predy, 780-413-7600	<a href="mailto:gpredy@cha.ab.ca">gpredy@cha.ab.ca</a>	✓
<b>University of Calgary (1)</b>	Dr. Margaret Russell, 403-220-4279	<a href="mailto:mlrussel@ucalgary.ca">mlrussel@ucalgary.ca</a> <a href="mailto:Richard.Musto@CalgaryHealthRegion.ca">Richard.Musto@CalgaryHealthRegion.ca</a>	✓ ✓
<b>University of Manitoba (Winnipeg) (2)</b>	Dr. Lawrence Elliott, 204-789-3404	<a href="mailto:elliottl@cc.umanitoba.ca">elliottl@cc.umanitoba.ca</a>	✓
<b>McMaster University (Hamilton) (2)</b>	Dr. Elizabeth Richardson, 905-546-2424, x3501	<a href="mailto:erichard@hamilton.ca">erichard@hamilton.ca</a>	✓
<b>University of Toronto (3)</b>	Dr. Bart Harvey, 416-978-7489	<a href="mailto:bart.harvey@utoronto.ca">bart.harvey@utoronto.ca</a>	✓
<b>Queen's University (Kingston) (1)</b>	Dr. Ian Gemmill, 613-549-1232 x234	<a href="mailto:dr.i.m.gemmill@healthunit.on.ca">dr.i.m.gemmill@healthunit.on.ca</a>	✓
<b>University of Ottawa (0 - inactive)</b>	Dr. Rama Nair, 613-562-5800 x8282 Dr. Brenda Wilson, 613-562-5800 x8261	<a href="mailto:rnair@uOttawa.ca">rnair@uOttawa.ca</a> <a href="mailto:bwilson@uOttawa.ca">bwilson@uOttawa.ca</a>	✓ ✓
<b>Francophone (4 positions):</b>			
<b>McGill University (Montréal) (1) (bilingual)</b>	Dr. Alix Adrien, 514-528-2400, x3681	<a href="mailto:alix.adrien@mcgill.ca">alix.adrien@mcgill.ca</a>	✓
<b>Université de Sherbrooke (at Montréal) (1)</b>	Dr. Maryse Guay, 450-928-6777 x3070	<a href="mailto:m.guay@rrsss16.gouv.qc.ca">m.guay@rrsss16.gouv.qc.ca</a>	✓
<b>Université Laval (1)</b>	Dr. Pierre Lajoie, 418-656-5139	<a href="mailto:pierre.lajoie@sss.gouv.qc.ca">pierre.lajoie@sss.gouv.qc.ca</a>	✓
<b>Université de Montréal (1)</b>	Dr. Marie-France Raynault, 514-528-2400 x3892	<a href="mailto:marie-france.raynault@umontreal.ca">marie-france.raynault@umontreal.ca</a>	✓
<b>Provincial Ministries:</b>			
<b>BC</b>	Libby Posgate, 250-952-1107	<a href="mailto:libby.posgate@gems9.gov.bc.ca">libby.posgate@gems9.gov.bc.ca</a>	✓
<b>Alberta</b>	Bill Duperron, 780-422-2528	<a href="mailto:bill.duperron@gov.ab.ca">bill.duperron@gov.ab.ca</a>	✓
AIMG	Liz 1-866-810-8184, 403-210-8184 <a href="http://www.aimg.ca">http://www.aimg.ca</a>	<a href="mailto:aimg@ucalgary.ca">aimg@ucalgary.ca</a>	✓
<b>Manitoba</b>	Dr. Chris Burnett, 204-788-6367	<a href="mailto:cburnett@gov.mb.ca">cburnett@gov.mb.ca</a>	✓
Workforce planner	Jerry Ross, 204-788-6666	<a href="http://www.gov.mb.ca/health/mlpimg">www.gov.mb.ca/health/mlpimg</a>	✓
Manitoba IMG			
<b>Ontario</b>	Jeff Goodyear, 416-327-8526	<a href="mailto:jeff.goodyear@moh.gov.on.ca">jeff.goodyear@moh.gov.on.ca</a>	✓
Physician Planning	Geoff Kettel, 416-327-7391	<a href="mailto:geoff.Kettel@moh.gov.on.ca">geoff.Kettel@moh.gov.on.ca</a>	✓
Ont. MOH Bursary Program	Brent Feeney, 416,327-7463	<a href="mailto:brent.feeney@moh.gov.on.ca">brent.feeney@moh.gov.on.ca</a>	✓
IMG Ontario	Caroline Abrahams, 416-327-8331	<a href="http://www.oimgc.utoronto.ca">http://www.oimgc.utoronto.ca</a>	✓
<b>Québec</b>	Dr. Alain Poirier, 418-266-6700 <a href="mailto:alain.Poirier@msss.gouv.qc.ca">alain.Poirier@msss.gouv.qc.ca</a>	<a href="mailto:marie.rochette@msss.gouv.qc.ca">marie.rochette@msss.gouv.qc.ca</a>	✓
<b>Federal</b>	Bob Shearer, 613-954-8608 (details modeling Melissa Label 613-946-2098)	<a href="mailto:robert_shearer@hc-sc.gc.ca">robert_shearer@hc-sc.gc.ca</a>	✓
<b>Others:</b>			
<b>Department of National Defence</b>	Jean Robert Bernier, 613-945-6653	<a href="mailto:bernier.jjrs@forces.gc.ca">bernier.jjrs@forces.gc.ca</a>	✓
<b>University of Saskatchewan</b>	Dr. Bruce Reeder	<a href="mailto:reeder@skyway.usask.ca">reeder@skyway.usask.ca</a>	X
<b>U of T Postgraduate Medicine</b>	Dr. Murray Urowitz, 416-978-6709 Loretta	<a href="mailto:m.urowitz@utoronto.ca">m.urowitz@utoronto.ca</a>	✓
<b>Canadian Post-MD Education Registry</b>		<a href="http://www.caper.ca">www.caper.ca</a>	✓
<b>CaRMS</b>	Sandra Banner, 613-237-0075, 877-carms42	<a href="http://www.carms.ca">www.carms.ca</a>	✓

**Table 2. Attributes of Canadian Community Medicine Residency Programs**

Program	Positions	Interviews/ Applicants	Proportion matched	Type of trainee	% Completing % Practicing PH	Re-entry mechanism	IMG mechanism	Program Components
<b>UBC (mid 1970s)</b>	3 CaRMS 1 re-entry (or 2 & 2)	9/18 CaRMS 3/? re-entry	100% this year (often less)	50% CaRMS 10% transfer 50% re-entry variable IMG	90% 80%	-2 <sup>nd</sup> CaRMS match -PostGrad Med allocates ad hoc -word-of-mouth	-2 <sup>nd</sup> CaRMS match -No Co Med in IMG program	-MHSc in PGY1 (major paper) -CCFP in PGY2 & 3 (PH rotations) -PH rotations in PGY4 & 5 (+/- Field Epidemiology x1y)
<b>U Calgary (early 1980s)</b>	1 CaRMS occ re-entry occ transfer	10/10	66% → 2 <sup>nd</sup> match	100% CaRMS occ re-entry occ IMG	100% 90%	-2 <sup>nd</sup> CaRMS match -PostGrad Med allocates 3 positions ad hoc -Rural Physician Action Program -Regional Health Authority ad hoc	-2 <sup>nd</sup> CaRMS match -Ad hoc -No Co Med in AIMG program	-rotating or 1 <sup>st</sup> yr CCFP in PGY1 -CCFP in PGY2 & 3 -M Co Med (major paper) or MSc (thesis) over PGY2 & 3 -PH rotations in PGY4 & 5
<b>U Alberta (2004)</b>	1 CaRMS occ re-entry	7/10	100% (1 year)	100% CaRMS occ re-entry occ IMG	n/a	-2 <sup>nd</sup> CaRMS match -PostGrad Med allocates ad hoc -Rural Physician Action Program -Regional Health Authority ad hoc	-2 <sup>nd</sup> CaRMS match -Ad hoc -No Co Med in AIMG program	-rotating PGY1 or CCFP in PGY1 & 2 -MHSc in PGY2 / MSc (thesis) in PGY2 & 3 -PH rotations in PGY3-5
<b>U Manitoba (late 1980s)</b>	1 CaRMS occ re-entry occ transfer	6/10 (normally 5/8) logistics make intvs difficult	100%	80% CaRMS (20% IMG) 10% transfer 10% re-entry	90% 100% (including some clinical)	-2 <sup>nd</sup> CaRMS match -PostGrad Med allocates 2 positions ad hoc	-2 <sup>nd</sup> CaRMS match -No Co Med in IMG program	-CCFP in PGY1 & 2 (50% of trainees choose) -MSc (thesis) in PGY2 or 3 (non-thesis MPH in development) - PH rotations in PGY3-5 *Considering a longitudinal CCFP option
<b>U Toronto (mid 1970s)</b>	3 CaRMS 1-2 of: re-entry transfer IMG	18/18	100%	80% CaRMS 15% transfer 5% re-entry 0% IMG (pot. to increase)	86% 75%	-2 <sup>nd</sup> CaRMS match -PostGrad Med allocates ad hoc -word-of-mouth -Medical Officer of Health in Training Bursary Program	-IMGO program	-CCFP longitudinal over PGY1, 2, & 3. -MHSc (non-thesis) MSc (thesis) in PGY2 & 3 -PH rotations in PGY4 & 5 (1.5-2yr)
<b>McMaster U (1980s)</b>	2 CaRMS occ IMG occ VISA trainee	11/13	50% last 2yrs. -no 2 <sup>nd</sup> match	80% CaRMS 10% transfer 10% IMG	100% (2003-2004) 100% (2002-2004) lower in past	-PostGrad Med allocates ad hoc -Medical Officer of Health in Training Bursary Program	-IMGO program	-CCFP longitudinal over PGY1, 2, & 3 -MHSc (non-thesis) MSc (thesis) in PGY1, 2, & 3 (1-2yr) -PH rotations (PGY 2-5) (2yr)
<b>Queen's U (2005) (1<sup>st</sup> resident in 2006)</b>	1 CaRMS ?transfer ?re-entry ?IMG	n/a	n/a	n/a	n/a	-2 <sup>nd</sup> CaRMS match -PostGrad Med allocates ad hoc -Medical Officer of Health in Training Bursary Program	-IMGO program	-CCFP PGY1 & 2 -MSc (non-thesis, thesis) or non-degree coursework only in PGY3 & 4 (1-2yr) -PH rotations in PGY4 & 5

<b>McGill* (mid 1980s)</b>	1 CaRMS occ transfer	12/15	100%	100% CaRMS	100% most (including some clinical)	-No official re-entry in Québec	-2 <sup>nd</sup> CaRMS match	-rotating or 1 <sup>st</sup> yr CCFP in PGY1 -2 <sup>nd</sup> year CCFP over PGY2 & 3 or in PGY5 -MSc Epi (thesis) over PGY2 & 3 -PH rotations in PGY3-5
<b>U de Montréal*§ (1980)</b>	1 med school 1 re-entry occ transfer occ IMG	3/3 7/7	100%	50% med school (internal match) 25% re-entry (varies yr to yr) 25% transfer	100% 80%	-No official re-entry in Québec -Unofficial re-entry , apply directly to program	-IMG training through Internal match -system does not formally provide IMG training	-rotating PGY1 in CCFP, optional PGY2 -MCommH (thesis) over PGY2 and 3 -PH rotations x2y -Québec offers 2-wk field epi training ("CIEPIQ")
<b>U de Sherbrooke*§ (1980s)</b>	1 med school occ transfer occ re-entry no IMG	3/3	100%	100% med school (internal match)	90% 90%	-No official re-entry in Québec	-IMG training through Internal match -system does not formally provide IMG training	-rotating or 1 <sup>st</sup> yr CCFP -CCFP if desired (not popular) -MSc (thesis) over PGY2 and 3 -PH rotations in PGY4 & 5
<b>U Laval§ (1977)</b>	1 med school occ transfer occ IMG	4/6	100%	100% med school (internal match) 5-10% transfer 5% IMG	90% 100%	-No official re-entry in Québec -Has had many re-entry trainees	-IMG training through Internal match -system does not formally provide IMG training	-rotating PGY1 -MPH (non-thesis) or MSc Epi (thesis) over PGY2 & 3 -PH rotations in PGY3-5

\* Joint program      § Outside the CaRMS match

CaRMS = Canadian Resident Matching Service    occ = occasional  
MSc = Masters of Science      MHS = Masters of Health Science

IMG = International Medical Graduate    CCFP = Canadian College of Family Practice  
MCommH = Masters of Community Health      PH = Public Health

PGY = Postgraduate year (of training)

### **3. Community Medicine Residency Program Descriptions and Trends**

The following information is derived from personal interviews, primarily with Community Medicine residency program directors at each of the Canadian programs, and other key informants named in [Table 1](#). The information is self-reported and differs in some instances from other data sources (e.g. CaRMS reports).

#### **❖ How many Community Medicine residency positions are there in Canada, and how has this changed recently?**

A total of 16 positions exist across Canada, and several more may be available on a year-to-year basis. In general, there appears to have been a recent increase in the number of positions, with the exception of Québec, whose priorities for training are set annually by the government, and may increase or decrease relatively dramatically in a short time. Programs in Québec hope to be increasing total provincial enrollment from 4 positions to 6 or 8 in the next year or two. U of T lost a position in the mid-1990s (from 4 to 3 per year).

UBC, Manitoba, Hamilton, McGill, and Sherbrooke have increased their Community Medicine enrollment in the past 2 or 3 years; however, Université de Montréal lost positions in 2004 and 2005.

U of A has a new program since 2004 with one position per year. Queen's University is launching a new program for the 2006 match, and University of Ottawa is planning to re-launch their program (inactive since 1998), possibly in conjunction with Queen's as early as 2006. UBC is expecting an increase in residency spots, as the undergraduate medicine program is increasing in size.

#### *Barriers to recruitment:*

Universal sentiment was voiced that although more positions are needed across the country, these must be filled with interested and qualified applicants, and work needs to be done to create and foster interest in the specialty. However, not every year are there enough suitable applicants, either through the CaRMS match (Canadian Resident Matching Service<sup>1</sup>), or re-entry, and some training positions may go unmatched. Recently, medical school curricula have focused attention on public health issues and systems, however, better awareness, even at undergraduate and high-school levels needs to be paid to careers in public health. Additionally, the potential for re-entry into public health training should be promoted in the existing medical community. Program directors strongly voiced that the Public Health Agency of Canada (PHAC) and other national bodies should focus attention and resources toward generating an awareness and profile of Community Medicine as the interesting and rewarding career it can be.

#### **❖ How many positions were matched on the first match?**

All programs report usually matching all their positions in the first match, although CaRMS statistics indicate that they frequently do not (see [Table 7](#)), with positions going unmatched in 9 of 12 reported years.

#### **❖ Do you feel that your program could match more positions than it has?**

Most of the programs state that they could match more positions than they are allocated. CaRMS statistics corroborate this observation. Most candidates whose first choice is Community Medicine are matching to a Community Medicine program, but may match to another discipline and occasionally are unmatched (see [Table 7](#)).

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<sup>1</sup> The Canadian Resident Matching Service (CaRMS) works in cooperation with medical schools and students to provide the following services: an electronic application service and a computer match for entry into postgraduate medical training. Each year, most graduating Canadian medical school students participate in the First Iteration Match. In addition, 700 "independent" applicants compete for the approximately 200 positions that remain available in the Second Iteration Match. Independent applicants include former graduates of Canadian medical schools, U.S students, and graduates of international medical schools. CaRMS provides an orderly way for applicants to decide where to train and for program directors to decide which applicants they wish to enrol in postgraduate medical training.

**UBC** – states that generally, they can match only as many CaRMs positions as they have concomitant Family Medicine opportunities (currently 2), but could match another spot if they were able to offer Canadian College of Family Practice training and certification (CCFP), and could match up to 3 re-entry positions per year. UBC has recently revamped their program to allow integration of family medicine training into residency. After trying a few other models (re-entry positions only; no option for CCFP, CCFP in 1<sup>st</sup> and 3<sup>rd</sup> postgraduate years (PGY) years), they are currently offering CCFP in 2<sup>nd</sup> and 3<sup>rd</sup> PGY years, and requiring some CCFP placements to be done in rural areas, linking up with the local public health unit (PHU). They allow a possibility of the final year of residency to be done as a Field Epidemiologist trainee, and the concomitant salary is paid by the Field Epidemiology program and is higher than that of a PGY-5 trainee.

**U of C** – states that they could easily match one or two more spots per year, but would need to increase the capacity for accredited training sites and supervision.

**U of A** – yes, one extra position (for a total of two) per year.

**U of M** – yes, one extra position every other year.

**U of T** – yes, one to two additional positions per year.

**McMaster** – yes, but could not function well without further development of the graduate school & residency program.

**Queens** – no, the program is too new (no residents yet!).

**McGill** – yes, one to two extra positions per year (total of two to three residents) would be ideal.

**Montréal** – yes, five positions per year would be ideal.

**Sherbrooke** – yes, one extra resident for a total of two residents per year would be ideal.

**Laval** – yes, the program had up to four residents per year previously.

#### ❖ **What is your priority/guiding principle when choosing a resident?**

The primary attribute of a prospective resident is that the individual exhibit some demonstrated commitment to or knowledge of public health. Most programs appear to be looking for persons who would make excellent Canadian public health practitioners, rather than those primarily interested in research or international health (although some programs encourage an interest in both). Other desirable characteristics include maturity, a desire to serve the public, excellent clinical skills, and an interest in social justice.

#### ❖ **In general, how long is the training period for each type of resident?**

Training after medical school is 5 years (including time spent meeting the requirements of a CCFP, if chosen). In other cases, such as resident transfers and re-entry positions, the Royal College of Physicians and Surgeons of Canada performs an Assessment of Training to determine the number of required years of residency. In general, a resident transferring in from another program will receive 1 year credit, a person with a prior Masters degree in epidemiology or public health will receive 1 or 2 years credit for it, a re-entry person with a 1-year rotating internship will receive 1 year credit, and a person with a 2-year residency in Family Medicine will receive up to 2 years credit. The length of the usual 5-year training period is reduced by the amount of the credit.

#### ❖ **How are your training positions funded?**

More detail is included in the section on [Provincial](#) funding mechanisms.

Postgraduate training generally is funded by the provincial Ministry of Health, though sometimes is funded by a combination of governmental departments, for example the Ministry of Advanced Education and the Ministry of Infrastructure. Each province routes funding and salaries through different bodies, such as hospitals, and university departments of postgraduate medicine. Only slightly more than half of the cost of training a resident is represented by the resident salary and benefits, with another fixed sum allocated to the university (see section on provincial funding).



Resident salaries are negotiated by provincial house-staff associations, and vary between the provinces (but not between program within a province). PGY-1 salaries range from a low of \$36,543 (QC) to a high of \$44,230 (ON), and PGY-3 from \$44,221 (QC) to \$54,765 (ON), and PGY-5 from \$51,601 (QC) to \$62,358 (ON).

In the case of Transfer residents, generally, funding seems to “follow the resident”, but in some cases (e.g. Manitoba), funding stays with the program, so when a resident wants to transfer into the program, they take the existing CaRMS spot for the year. Funding that stays with the program is viewed as less desirable by the receiving program.

Unless funded through a specific IMG training program, IMGs are funded through CaRMS, and are paid on the same scale of remuneration.

Re-entry physicians are funded through a variety of mechanisms, but usually through one of several *ad hoc* mechanisms, such as “floating” funding in the university’s Postgraduate Medicine department, or through a Return-of-service agreement with a health authority that requires a Community Medicine specialist.

❖ **Does the program receive funding for any position?**

Many residency programs allow a small budget (i.e.  $\leq$  \$500) for books and conferences for residents. As well, several programs at certain times, may offer small travel & board stipends provided by the program, the province, or the hosting agency for residents doing out-of-town rotations.

**UBC** – no.

**U of C** – no, but the program recently received a grant from government that provided money to be used by residents for travel and living expenses while doing out-of-town rotations.

**U of A** – no. Of note, the residency program is seeking approval for a proposed model by which tertiary PHUs could receive funding for training residents, including funds for research and education.

**U of M** – no, funding is through Manitoba Health, and “in-kind” teaching and supervisions from the Winnipeg Regional Health Authority.

**U of T** – no.

**McMaster** – no.

**Queens** – no.

**McGill** – no.

**Montréal** – no, however, additional funding comes from the University as the salary of the Department Chair (who is also the residency program director).

**Sherbrooke** – no.

**Laval** – no.

❖ **In the past few years, what proportion of residents actually completes their training?**

❖ **What proportion of graduates ultimately practices in the area of “Public health” proper? (e.g. Public Health Units, Provincial/Territorial, Federal Ministries of Health and related agencies)?**

In all programs, almost all residents complete their training, and most (>75%) go on to practice Public Health proper, for at least some time. Some programs/provinces (e.g. Manitoba) seem to lose more graduates to other provinces, whereas Québec claims almost 100% retention.

❖ **What is the usual composition of your residency program?**

The minimum requirements of fellowship of the Royal College of Physicians and Surgeons of Canada (RCPS) are 1 rotating clinical year, 1 academic year of course work in Community Medicine, and 1 year of required PH field rotations. Two additional years are to be spent pursuing additional academic, clinical, or field work.

There is no requirement for further clinical training, though most residents choose to complete the 2-year requirement for CCFP certification and licensure, as the CCFP qualification is unambiguous and widely accepted, unlike the Community Medicine specialization, which some agencies/individuals do not recognize to be a clinical specialty. In Québec, residents do not often choose to complete the CCFP, although the option is available.

There is no requirement for any formal graduate degree, only that the RCPSC educational objectives be met, including that specific biostatistics and epidemiology knowledge be obtained. Most residents receive a “professional” Master’s degree (usually 18 months) in Health Sciences, Public Health, or a Master of Science degree in Epidemiology (usually 24-36 months).

Usually 18 to 24 months are spent doing rotations in public health agencies, and 12 months of these rotations are compulsory, with an additional 6 – 12 months spent in electives.

The precise program composition varies by university, and is always evolving. However, generally, residents are allowed to do two years in Family Medicine, toward achieving a CCFP. Usually, these 2 years are spent as the PGY1 and 2 years. If a CCFP is not allowed/desired, trainees are in a better position to have time to complete a thesis-based Master’s degree. Also, more rotations may be performed. The following are the most common program routes:

### Postgraduate

Year of Training	Model 1	Model 2	Model 3	Model 4
PGY1 –	CCFP	CCFP	Masters	Rotating Clinical Year
PGY2 –	CCFP	CCFP/ Master’s	CCFP	Master’s
PGY3 –	Master’s	CCFP/ Master’s	CCFP	Master’s/Rotations
PGY4 –	Rotations	Rotations	Rotations	Rotations
PGY5 –	Rotations	Rotations	Rotations	Rotations

### ❖ Do you require/ encourage/ allow trainees to do rotations outside of the city?

**UBC** – yes, residents are strongly encouraged to do a rotation in a smaller health authority (e.g. Prince George, Fraser Valley) and in the Provincial Health Office in Victoria. A rotation at CIDA in Ottawa often is available. Certain international rotations are allowed also, for example, the Caribbean Epidemiology Centre (CAREC), Pakistan (STOP polio eradication).

**U of C** – yes, a rural rotation in a Regional Health Authority is mandatory, and residents are encouraged to do a rotation at Alberta Health & Wellness in Edmonton. Rotations in other provinces are possible, as is an elective abroad (e.g. Guatemala, China).

**U of A** – yes, residents are strongly encouraged to do a rural PHU placement, and are allowed to do placements in other provinces (e.g. in Saskatoon), and even internationally (U of A has an ongoing initiative with Uganda).

**U of M** – yes, 3 months in rural health unit (resident commutes 3 days/wk) is required. Residents may do up to 6 months of rotations outside Manitoba.

**U of T** – no rural placements are required (though one is for CCFP), but opportunities exist for those interested.

**McMaster** – placements elsewhere are not required but are encouraged in partner PHUs and institutions.

**Queens** – yes, placements in other PHUs and institutions will likely be a requirement of the program.

**McGill** – no rural placements are required, although residents are encouraged to do rotations in rural and aboriginal settings. Only 3 months of placements are allowed outside of Québec.

**Montréal** – yes, residents are encouraged to do rotations in remote, Inuit, and aboriginal communities, as well as certain international destinations with which the training program has a relationship (e.g. Africa, Switzerland).

**Sherbrooke** – yes, placements in Québec, particularly rural ones, are encouraged.

**Laval** – yes, placements in Québec are encouraged.

❖ **Do you feel that your program has the current capacity to take on extra residents?**

Most programs reported that they felt they could take on more residents, usually one to two more per year (or every other year), particularly re-entry residents. The Québec programs in particular feel they have capacity to train more residents, as the programs have been much larger in the past, and tend to fluctuate greatly from year to year, based on provincial directives.

❖ **Are there specific mechanisms for Re-entry?**

More details on these programs are available under the [Provincial](#) headings later in this document.

**UBC** – no, though this is a large component of program (50%). Spots are allocated through the Postgraduate Medicine Office on an *ad hoc* basis.

**U of C** – yes, a Rural Physician Action Plan allows (rural) physicians to apply for re-entry into Royal College Specialty training programs. The number of positions varies year to year (1 in 2004) based on the outcome of the CaRMS match, and one may apply to any RCPSC specialty. No Return-of-service is required if the applicant has been practicing in rural Alberta; however, if they have not, then the applicant must sign a Return-of-service agreement with a Regional Health Authority.

**U of A** – *ibid.*

**U of M** – Manitoba offers three routes for re-entry: First, each year three “generic” training positions in the Department of Postgraduate Medicine are offered, and the field of training is flexible, based on demand and need (a year-per-year Return-of-service anywhere in Manitoba is required). Second, a Regional Health Authority may elect to fund a training position in an area in which they have identified a need (a Return-of-service is required). Third, re-entry candidates may apply to the second iteration of the CaRMS match, with no Return-of-service required.

**Ontario** – Community Medicine is one of 11 specialties that has been designated a re-entry specialty in Ontario, and receives additional government funding. As well, the province offers a “Medical Officer of Health in Training Bursary Program” (see section on provincial funding) which funds practitioners to receive graduate training in Community Medicine (not FRCPC/ RCPSC training). Finally, the province administers a “Repatriation Program” which funds eligible physicians for training of up to 2 years duration that would bring a candidate to the level eligible to sit the RCPSC Specialty exams.

**U of T** – U of T has received occasional re-entry residents.

**McMaster** – *ibid.*, however, has not received any re-entry residents in recent years.

**Queens** – *ibid.*

**Québec** (McGill, Montréal, Sherbrooke, Laval) – Currently, the province of Québec does not formally allow re-entry into Community Medicine training. Previously re-entry was a viable and prodigious route. Lobbying for formal paths to re-entry is recommended by the residency programs. In the past, no Return-of-service has been required for re-entry. Re-entry candidates have applied along side students graduating from Medical School in the same competition. The funding comes directly from government for the position.

*Re-entry Salaries*

It is universally acknowledged that a resident’s salary represent a decline in income for most practicing physicians, and hence, is a disincentive to re-entry (to a starting salary of somewhere between \$36,500 – \$55,000/yr depending on province and the assessed/awarded PGY year of training. It should be noted that many re-entry candidates will be assessed at the PGY3 training level, and their starting salary will reflect this). This decrease in salary can sometimes be a serious one, particularly when there is a dependant family or a relocation to an expensive urban training centre involved. To attract good candidates, some programs have informally increased re-entry salaries by offering moonlighting, on-call opportunities, and special projects to re-entry residents, but this had been recognized as a contentious issue from a perspective of equity with other trainees. In some cases, the diminished salary is less of an issue than is a requirement to relocate for training. If a regional health authority or agency is sponsoring the training, then the salary may be augmented.

### ❖ Are there specific mechanisms/programs/initiatives for IMG Training?

More details on these programs are available under the [Provincial](#) headings later in this document.

All non-Canadian and non-American schools are considered “foreign”, and are given IMG status. It is notable that no province appears to allow IMGs who are not current residents of their province to apply to their program(s) for training, although Manitoba is planning to allow applications from other provinces.

At several universities, one route for IMG entry into residency training is the 2<sup>nd</sup> CaRMS match, if spots are unmatched in the first match, and they are not “converted” to a different residency position (e.g. “given” to family medicine or another specialty at the same university).

**UBC** – St Paul’s Hospital has a six-position IMG program, open to BC residents, but is geared toward training Family Practitioners only (see [www.familypractice.ubc.ca/residency](http://www.familypractice.ubc.ca/residency)). IMGs can apply to CoMed if a spot is available in the 2<sup>nd</sup> CaRMS match. Also, IMGs have occasionally brought their own funding from their country of origin, have participated in training at UBC, and have returned home (“Visa” student).

**U of C** – the government of Alberta has an IMG training program with a separate stream of funding (see <http://www.aimg.ca>) for IMGs who are resident of Alberta. Historically, it has been driven by a need for Family Practitioners (12 positions available in 2005), but recently has opened up to specialties (8-10 positions in 2005), albeit not Community Medicine (Anaesthesia, Diagnostic Radiology, Internal Medicine, Paediatrics, Surgery, Obstetrics and Gynaecology, Orthopaedic Surgery, Pathology, Psychiatry). These priorities are set by government. An eligible resident must first complete a 4-month unpaid Clinical Orientation before being selected for a residency program, and is not allowed to transfer from one residency to another during training.

**U of A** – *ibid.*

**U of M** – Manitoba does not formally offer Community Medicine training for IMGs. Manitoba offers the Medical Licensure Program for IMGs who are residents of Manitoba (MLPIMG), focusing on training primary care physicians (see <http://www.gov.mb.ca/health/mlpimg>). The program comprises peer-supervised practice in under-served Manitoba communities and occasionally, formal training periods. Enrollees have up to a maximum of 5 years to complete the LMCC II exam and up to 7 years to complete the requirements of a CCFP. Currently, this program is offered only in the area of Family Practice, not Community Medicine. As well, they offer a modified one-year Family Medicine residency training program for candidates when several areas needing improvement are identified. Both of these require a 3 –year Return-of-service.

**U of T** – Ontario offers the IMG Ontario program to some 200 (100 Family Physicians and 100 Specialists) candidates per year, and Community Medicine is among the eligible specialties (see <http://www.oimgc.utoronto.ca>).

**McMaster** – *ibid.*

**Queens** – *ibid.*

**Québec** – appears to be relatively closed to *retraining* IMGs. There is no formal training program for IMGs. Those who are eligible for practice (i.e. have a “residency training card”) can apply for retraining along side new graduates in the same competition. However, Québec has mechanisms to evaluate foreign training, and provide provisional licensure to those who meet defined criteria (see [www.cmq.org](http://www.cmq.org)).

### *IMG Salaries*

IMG salaries are the same as those set out in the agreements between the provincial government and the provincial associations of interns and residents. In some situations, for example, during an initial assessment of skills period, IMGs may not be paid, but once they enter formal training, they are paid at the same rates as other equivalent residents.

## **4. Barriers to Training and Suggestions for Improvement**

### **❖ Are there any recommendations you have for removing barriers and optimizing the capacity for residency training?**

A recent examination of the issue of recruitment to residency training concluded that:

“Although exposure to a discipline is necessary for informed decision-making, it alone does not seem to be sufficient to generate an increase in popularity. Reasons for the observed trends are likely multifactorial and cannot be elucidated from these data alone. Still, program directors of specialties seeing a decline in popularity may need to address factors that appear to influence applicants’ decisions to choose the more popular specialties. Solutions for increasing the number of high-quality applicants to less popular programs may need to go beyond the training period and critically address the practice environment” (p.737).

[A. Harvey, J.G. DesCôteaux, & S. Banner (2005). “Trends in disciplines selected by applicants in the Canadian resident matches, 1994–2004”. CMAJ; 172(6):737.]

Residency program directors offered many interesting and creative proposals to improve the training process, many of which fell into clearly consistent themes. Note that these often comprised increased resources for and improvements to their programs, as would be expected, but do not necessarily result in an increased volume of residents exiting the programs, at least in the short term.

- Preceptor-ship money – Preceptors in Community Medicine, frequently located in governmental and non-governmental agencies are not funded for their teaching and supervisory activities. This is unlike the clinical specialties, where it is acknowledged that it takes time and resources to teach and supervise trainees. This environment creates a reluctance to take on residents. It was suggested also that there should be funding available to supervise and teach residents in disciplines other than Community Medicine.
- Inter-Program Collaboration – Have a more collaborative relationship between training programs,
  - To allow trainees to seek out rotations in different cities, agencies (several respondents mentioned that rotations at PHAC and Health Canada would be very desirable), & environments, sharing the strengths of different programs. For example, UBC has a strong Occupational Health component
  - Shared curricula & academic resources (e.g. online)
  - Similarly, it is felt that both trainees and health authorities would benefit from the chance to do rotations at more sites, and this would require funding for travel and living expenses
  - Also, sharing residency rounds through video conferencing would be useful
  - It is felt that each residency program must achieve a “critical mass” in trainees, and this can be facilitated by enabling collaboration and exchange between programs
  - Conference funding for residents
  - Funding for in-person meeting of program directors is helpful
  - Funding for a national Community Medicine Residency website
  - Integrate Field Epidemiology into residency program – bi-directional placements, wide-availability of 3-week “summer” course. Québec has a 2-week summer course in epidemiology called “CIEPIQ”.
- Visibility of Community Medicine – Serious attention and effort should be spent on marketing issues such as creating awareness of the field of public health, the career of Community Medicine, and attracting all types of resident to this specialty (general public, high-school, undergraduate, medical school, in-practice).
  - An interesting idea that was suggested by one respondent was to offer placement opportunities to non-Community Medicine residents, with the goal of increasing the visibility and credibility of the specialty, as well as building stronger relationships between the public health agencies and the community. Obviously, this may be difficult in settings where placements are in short supply. As well, the perennial issue of how to give residents appropriate levels of professional responsibility in institutional management structures remains, and is even intensified

- Developing a "Community Medicine Interest Group" for medical students as a way of further fostering interest in and understanding of Community Medicine
  - Putting faces on the varied COMMUNITY MEDICINE career paths
  - Posting a list of program graduates and their most recent employment.
- Re-entry Positions – A relatively immediate and economical benefit could be achieved by increasing the number of re-entry positions, thereby decreasing training length by at least one and often two years.
    - Re-entry positions can be created on an as-needed (or as-projected) basis with *ad hoc* funding from a variety of sources.
    - Many residency programs state that they are willing and able to accept more residents, as long as they have adequate funding.
    - Explore mechanisms to enhance salary of re-entry trainees, so as to reduce this barrier to re-entering training.
    - Expansion of re-training options for existing PH physicians (e.g. MPH or FRCPC bursary programs for MOHs).
  - Distance Education – Implement mechanisms to access distance education in epidemiology and public health.
  - Recruitment of Ex-Pat Physicians – An immediate strategy to help to address the shortage of Community Medicine physicians would be to try to recruit trained (Canadian) physicians back from the USA for practice or re-training. Ideally these would be Canadians, who have completed residency in a specialty analogous to Community Medicine (e.g. Preventive Medicine) in another country.
  - Clinical Work – Increase opportunities for Community Medicine physicians to do clinical work, which may increase job satisfaction, credibility and visibility.
  - Ground-level Needs Planning – Currently, allocation of residency training positions tends to be overly reliant on the perspectives of the postgraduate deans of medicine and universities. To balance this, government should also seek out information from the ground level (e.g. Health Authorities, the community) about their needs for Community Medicine physicians. Health Authorities should be represented on "allocations committees".
  - Conditions of Work / Career Satisfaction – Recognize that complex social determinants are resulting in an increasing need for "containable careers" in medicine, including demands for part-time and intermittent work.
- ❖ **If funding were available (e.g. from the Public Health Agency of Canada) for extra training positions/ incentives, how do you think it should be used or delivered?** (e.g. as scholarships, bursaries, fellowships, a separate stream?)
- ❖ **Should funding be funneled through the residency program, or through another agency such as PHAC or the RCPSC?**
- Offer 2 candidates per year funding to take to whatever program they wish.
  - Fund at least 4 re-entry positions per year.
  - Applicants should apply to PHAC or some other agency (e.g. NSSCM) and once chosen, they should be allowed to take their funding to the program of their choosing.
  - Enable training to be completed in more than one Community Medicine program.
  - Fund awareness and recruitment initiatives.
  - Create a marketing plan.
  - Increase recruitment of First Nations and aboriginal trainees.
  - Create a National Public Health Plan, both as a means of creating a public health human resources plan, and also as tool for marketing the Community Medicine specialty.
  - Some respondents suggested that PHAC work primarily with provinces, not universities, while others preferred that PHAC deliver funding for additional training positions or initiatives through the universities or the RCPSC.

## **5. Postgraduate Resident Salaries and Provincial Funding Processes**

Resident salaries vary across provinces and by postgraduate year-of-training. They range from a PGY-1 low of \$36,543 (QC) to a high of \$44,230 (ON), and PGY-3 from \$44,221 (QC) to \$54,765 (ON), and PGY-5 from \$51,601 (QC) to \$62,358 (ON). Resident salaries are negotiated annually (generally) with the provincial house-staff organizations (i.e. associations of internes and residents), not with individual residency programs (see Tables below).

**Table 3. National and Provincial House-staff Organizations**

<a href="#">CAIR</a>	Canadian Association of Internes and Residents
<a href="#">PAR-BC</a>	Professional Association of Residents of British Columbia
<a href="#">PARA</a>	Professional Association of Residents of Alberta
<a href="#">PAIRS</a>	Professional Association of Internes and Residents of Saskatchewan
<a href="#">PARIM</a>	Professional Association of Residents and Interns of Manitoba
<a href="#">FMRQ</a>	Federation des Medecins Residents du Québec
<a href="#">PARI-MP</a>	Professional Association of Residents in the Maritime Provinces
<a href="#">PAIRN</a>	Professional Association of Internes and Residents of Newfoundland

**Table 4. Postgraduate Salaries by Province and Level of Training (\$)**

<b>Province (year)</b>	<b>PGY1</b>	<b>PGY2</b>	<b>PGY3</b>	<b>PGY4</b>	<b>PGY5</b>
<b>BC (2003)</b>	43,869	48,939	53,330	57,405	61,734
<b>AB (2004)</b>	43,121	46,866	51,557	55,306	59,994
<b>SK (2004)</b>	43,372	47,300	51,225	55,132	59,011
<b>MB (2004)</b>	43,273	46,952	51,138	55,072	59,007
<b>ON (2004)</b>	44,230	51,628	54,765	58,475	62,358
<b>QC (2001)</b>	36,543	40,101	44,221	48,322	51,601
<b>NS (2004)</b>	41,845	45,394	49,668	53,353	57,465
<b>NL (2002)</b>	37,380	40,938	44,495	48,057	51,615
<b>Mean</b>	41,704	46,015	50,050	53,890	57,848
<b>Median</b>	43,197	46,909	51,181	55,102	59,009

The existence of additional provincial funding for teaching and infrastructure is an issue of particular significance for the field of Community Medicine, which has no clinical billings to “pad” the coffers of the residency program. As well, Community Medicine is somewhat unique in that there is generally no corporate (e.g. drug company) sponsorship of educational events for residents or initiatives including research.

## ❖ British Columbia

British Columbia is operating currently in an environment of expansion. Medical school enrollment is expected to double from 128 to 224 to 256 by 2011. The Ministry of Health Services pays the salaries of residents, and provides funding to the university Department of Postgraduate Medicine. Residency training positions will similarly double, but the current ratio of 1 graduating medical student to 1 residency position is expected to increase to 1:1.2. The process of allocating postgraduate training positions to particular residencies is achieved in two ways. First, a Postgraduate Education Task Force (comprising postgraduate deans of medicine, program directors, senior managers at health authorities, and provincial ministry of health representatives) examines the need for and will distribute the expanded number of training positions among residency programs. Second, the Vice President of Medicine in conjunction with health regions have a joint advisory committee which meets to discuss their resource needs, which are subsequently taken into account in the allocation of training positions. The funding formula for postgraduate medical education reflects resident salaries, program infrastructure, resident travel and board (up to 6 months per resident). No estimates were available for this report.

*CaRMS.* Graduating medical students may apply to 2 positions offered through the match. These positions are funded through the Ministry of Health Services.

*Re-Entry.* In the mid-1990s, formal re-entry training options were eliminated in BC. However, re-entry does occur in Community Medicine at UBC, and in fact, continues to be a significant path to FRCPC fellowship. Occasionally a Health Authority may fund a candidate through residency, and may require a Return-of-service in exchange. More frequently though, *ad hoc* funding is arranged through the Department of Postgraduate Medicine at UBC, when a suitable candidate is identified. Finally, if suitable candidates are not identified in the 1<sup>st</sup> iteration of the CaRMS match from the pool of graduating medical students, the spots will go unmatched, and will effectively be “reserved” for re-entry physicians and IMGs who may apply in the 2<sup>nd</sup> CaRMS iteration. No Return-of-service is required.

### *Skills Enhancement*

UBC offers a 6 – 12 month “Skills Enhancement” program (akin to an “R3” year), targeted to areas of need such as GP anaesthesia, emergency medicine, palliative care, general surgery, and internal medicine. A Return-of-service is not required, though it is expected that the physician usually will return to their community of origin, as the program is intended to equip practitioners with the necessary skills to serve their communities. Community Medicine training has not been an area of need identified by this program, but a period of training may be funded if the relevance and benefit to the community can be demonstrated to program administrators.

(<http://www.familymed.ubc.ca/enhancedskills>)

*IMG.* IMGs can apply to Community Medicine at UBC if a spot is available in the 2<sup>nd</sup> iteration of the CaRMS match. Also, IMGs have occasionally brought their own funding from their country of origin, have participated in training at UBC, and have returned home (i.e. as a “Visa” student, and this is generally not considered to be “IMG” training). Currently, BC is piloting a program to enhance IMGs performance in the 2<sup>nd</sup> CaRMS match. The 24 selected IMGs first complete a 12-week course (Introduction to the Canadian Health Care System), which is hoped to help to candidates perform well in interviews with programs, and to compete effectively in the match.

([www.familypractice.ubc.ca/residency](http://www.familypractice.ubc.ca/residency))

### *International Medical Graduate Program*

The Ministry of Health Services funds six postgraduate positions specifically for IMGs, but is geared toward training Family Practitioners only. The program is located at Vancouver’s St Paul’s Hospital,



and is open to BC residents. Eligible candidates undergo an evaluation process which includes an OSCE (Objective Structured Clinical Examination) and a 6 - 8 week clinical evaluation at St. Paul's Hospital. The four successful candidates from this evaluation are then required to take a six-month clinical introductory program before commencing the two-year Family Practice Residency Program. A Return-of-service is not required.

<http://www.familymed.ubc.ca/residency/apply/img.htm>

## ❖ Alberta

Alberta Health and Wellness funds a number of residency seats each year. The number of seats is determined in consultation with the Postgraduate Medical Education Advisory Group which consists of representatives from Health and Wellness, the Ministry of Advanced Education, the College of Physicians and Surgeons of Alberta, the university Departments of Medicine, the Rural Physicians Action Plan (RPAP) and the Regional Health Authorities. Funding for these seats, as well as working conditions are defined by the PARA-CAHCA Agreement, between the Professional Association of Residents of Alberta and the Council of Academic Health Centres of Alberta. Resident salaries range from \$43,121 (PGY1), to \$51,557 (PGY3), to \$59,994 (PGY5). Estimated costs of training are detailed in the table below. Note that Alberta is in the process of developing and implementing "Alternate Funding" plans for some of the departments at the Universities, but the details of these currently are not available.

**Table 5. Estimated Costs of Training in Alberta, 2003-2004 (\$).**

Cost of Training	PGY1	PGY2	PGY3	PGY4	PGY5
2003-04 Estimated Salary	43,121	46,866	51,557	55,306	59,994
2003-04 Benefits	8,846	10,326	10,953	11,695	12,472
Postgraduate Medical Education Office Costs*	33,628	33,628	33,628	33,628	33,628
Clinical Preceptor Honorarium (estimate)	12,500	12,500	12,500	12,500	12,500
Stipend	650	1,000	1,000	1,000	1,000
Meal Allowance - varies by usage	325	325	325	325	325
On-Call Costs - varies by usage	114	114	114	114	114
Total Cost Per Resident	\$99,184	\$104,409	\$109,727	\$114,218	\$119,683

\*Includes funding for teaching (didactic and clinical), program administration and supplies, Faculty Professional Development, Facility Space (not rent), and a 15% overhead levied by the university.

*CaRMS.* Graduating medical students can apply to 2 CaRMS positions, one at each of University of Alberta and University of Calgary. These positions are funded through Alberta Health and Wellness.

*Re-Entry.* The Rural Physician Action Plan (RPAP) allows (rural) physicians to apply for re-entry into Royal College Specialty training programs. The number of positions varies year to year (1 in 2004) based on the outcome of the CaRMS match, and any RCPCSC specialty is eligible. There is no Return-of-service requirement if the applicant has been practicing in rural Alberta; however if they have not, then the applicant must sign a Return-of-service agreement with a Regional Health Authority, negotiated on a case-by-case basis through the office of the Chief Medical Office or Medical Affairs, depending on the Region. (A link to each regions website can be found at: [http://www.health.gov.ab.ca/regions/map\\_lookup.htm](http://www.health.gov.ab.ca/regions/map_lookup.htm))

When a suitable candidate has been identified by a residency program, a training position may be funded on an *ad hoc* basis by the department of postgraduate medicine through a \$600,000 yearly fund from Alberta Health and Wellness to allow training for re-certification, dual-certification, upgrading and re-entry. Moreover, in some instances, Regional Health Authorities may elect to allocate funding to a particular candidate who is interested in Community Medicine (often an Acting Medical Health Officer), in exchange for a Return-of-service. Generally, the scale of remuneration will be the same as CaRMS, but it need not be. Finally, re-entry candidates can apply for any CaRMS positions that are available in the 2<sup>nd</sup> iteration of the match.

*IMG.* The government of Alberta has an IMG training program with a separate stream of funding for IMGs who are resident of Alberta. Historically, it has been driven by a need for Family Practitioners (12 positions available in 2005), but recently has opened up to specialties (8-10 positions in 2005), albeit not Community Medicine (Anaesthesia, Diagnostic Radiology, Internal Medicine, Paediatrics, Surgery, Obstetrics and Gynaecology, Orthopaedic Surgery, Pathology, Psychiatry). These priorities are set by government. An eligible resident must first complete a 4-month unpaid Clinical Orientation before being selected for a residency program, and is not allowed to transfer from one residency to another during training. Funding for these residents is paid as agreed in the PARA-CAHCA Agreement, like all other ministry-funded positions.

Because there has been no opportunity for IMG training in Community Medicine through the Alberta IMG program, the primary route to training is through the 2<sup>nd</sup> iteration of the CaRMS match, if there are unmatched Community Medicine positions. However, in 2006, Community Medicine will be one of the areas in which IMGs can choose to study. The number of applicants accepted will be determined by the department(s) of community medicine.

<http://www.aimg.ca/>

## ❖ Manitoba

Manitoba experiences a slight net influx of postgraduate trainees for residency, and they are planning to increase their undergraduate medicine positions over the next several years. However, only 30-40% of graduating residents remain in Manitoba. Historically, priority setting for residency training has been the domain of postgraduate medicine at the university, and was based more on impressions of need than systematic scientific assessment. However, Manitoba is in the process of developing a mathematical model of needs assessment. The five western Canadian medical schools are working together in this endeavor.

Resident salaries range from \$43,273 (PGY1), to \$51,137 (PGY3), to \$59,007 (PGY5). Manitoba is exploring the use of a funding formula that would pay the department of postgraduate medicine on a "per resident" basis, but this has not yet been implemented. Manitoba Health funds resident salaries and education costs (except for IMG salaries).

In Manitoba, it is the individual residency position that is funded, rather than the resident. Hence, if a resident desires to transfer fields of training, funding remains in the residency program, and does not follow the student to their new program, making transfers between fields more difficult. The university in partnership with the government is considering creating five "flexible" first-year residency positions, thereby facilitating transfers between programs.

*CaRMS.* Graduating medical students may apply to 2 positions offered through the match.

*Re-Entry.* Manitoba offers three routes for re-entry. First, each year, three "generic" training positions are offered by the Department of Postgraduate Medicine, and the field of training is flexible, based on demand and need. Applicants can apply to any residency through this route. Re-entry salary does not differ from CaRMS. A year-per-year Return-of-service anywhere in Manitoba is required. Second, a Regional Health Authority may elect to fund a training position in an area in which they have identified a need. A Return-of-service is required. However, there is potential to augment the salary beyond the level for CaRMS match candidates. Third, re-entry candidates may apply to the second iteration of the CaRMS match, with no requirement for a Return-of-service.

*IMG.* Manitoba does not formally offer Community Medicine training for IMGs, however, they do have several routes of training for IMGs interested in Family Practice. First, Manitoba offers the Medical Licensure Program for IMGs who are residents of Manitoba (MLPIMG), focusing on training primary care physicians. The program comprises conditional medical licensure along with peer-supervised practice in under-served Manitoba communities, and occasionally, formal training periods, ultimately leading to full licensure. Enrollees have up to a maximum of 5 years to complete the LMCC II exam and up to 7 years to complete the requirements of a CCFP. Currently, this program is offered only in the area of Family Practice, not Community Medicine. The salary is equivalent to CaRMS level. A 3-year Return-of-service in an under-served area of Manitoba is required.

Candidates applying for the assessment must meet all of the following criteria:

- be a permanent resident (landed immigrant) or Canadian citizen
- be a resident of Manitoba for at least 9 consecutive months before the CAPE assessment date
- have a minimum of one year of postgraduate medical training acceptable to the College of Physicians and Surgeons of Manitoba
- have practised primarily in general practice (primary care, family medicine)
- have been out of practice no longer than 10 years prior to March 31, 2005
- have an unexpired pass standing on the Medical Council of Canada Evaluating Examination (MCCEE) or Medical Council of Canada Qualifying Examination Part 1 (MCCQE1).

Of note, Manitoba plans to begin considering IMG applications from persons residing out-of-province.

<http://www.gov.mb.ca/health/mlpimg>).

Second, the MLPIMG offers ten 1-year training positions in Family Medicine. In 2004, 26 IMGs applied to this program, 13 received in-depth assessment, and 5 were found meeting the criteria for entry to the program; however, only 3 will complete this round of training. Again, a 3-year Return-of-service in an under-serviced area of Manitoba is required.

Third, in some cases, the training of various specialists may be assessed through the U of Manitoba, and the assessment/ teaching may last for a period of up to 1 year.

Fourth, Manitoba is turning some interest toward recruiting Canadian ex-patriots BACK to Canada, including those who have completed their medical school or residency training at international medical schools that are recognized by the World Health Organization. If a candidate's previous postgraduate training meets set-out criteria, the candidate is considered "practice ready", and if they have received a job offer from a regional health authority, they may be issued a conditional medical license. They then have 7 years to qualify for full licensure (up to 5 years to complete the LMCC II exam and up to 7 years to complete the requirements of a CCFP).

Finally, there is an effort being undertaken to create a generic and shared assessment tool for IMG applications for use in Western Canada (similar to the Manitoba "Clinicians Assessment and Professional Enhancement" (CAPE) assessment process).

## ❖ Ontario

The MOHLTC sets some priorities for recruitment, based on modeling the health human resource needs, and salient factors include population growth and the number and locations of physicians entering and exiting the specialty (e.g. through retirement, attrition to other provinces, internationally, tendency to decreased workhours, etc.). The MOHLTC then negotiates with the Departments of Postgraduate Medicine (the Council of Faculties of Medicine) to determine how to best meet these priorities, within the capacity and interest of the universities.

*CaRMS*. There were 5 *CaRMS* positions in 2004-05, and will be 6 in 2005-06 (and perhaps 7 in 2007-08). The Ministry of Health allocates resident salaries (ranging from PGY-1 of \$44,230 to PGY-5 \$62,358) plus funding for teaching ("geographic full-time" professor = \$12,000 /yr/resident), administrative support (office assistant = \$4,200 /yr/resident), and sundries, amounting to yearly funding of \$74,429 for each PGY-1, \$88,067/PGY-3 and \$97,753/PGY-5.

**Table 6. Estimated Costs of Training in Ontario, 2004-2005 (\$).**

Cost of Training	PGY1	PGY2	PGY3	PGY4	PGY5
2004-05 Estimated Salary	47,016	54,881	58,215	62,159	66,287
2004-05 Benefits	9,403	10,976	11,643	12,432	13,257
GFT Professor Salary \$12,000/year	12,000	12,000	12,000	12,000	12,000
GFT Administrative Support \$4,163/Year	4,163	4,163	4,163	4,163	4,163
Stipend (\$1,000/PGY1, \$1,200 for others)	1,000	1,200	1,200	1,200	1,200
Meal Allowance	846	846	846	846	846
Total Cost Per Resident	\$74,429	\$84,066	\$88,067	\$92,800	\$97,753

Note: These extra funds are not necessarily passed on to the residency programs. In Ontario, this money is paid to the hospitals, and the universities recover their portion of funding from the hospitals.

*Re-entry*. Community Medicine is a specialty designated for Re-entry in Ontario, and interested persons make an application to the Re-entry Steering Committee, comprising members of the MOHLTC, the Ontario Medical Association, and the Council of Faculties of Medicine of Ontario. The salary is the same scale as *CaRMS*, and a Return-of-service in an under-serviced community is required to a maximum of 2 years. Ontario offers up to 20 new specialty positions each year through this process.

### *Medical Officer of Health in Training Bursary Program*

As well, the MOHLTC, in conjunction with participating eligible boards of health, has offered since 2003 a "Medical Officer of Health in Training Bursary Program". Candidates do not enter a residency program, nor do they become qualified to receive an FRCPC in Community Medicine after completing training. Rather, this program allows practicing public health physicians to acquire some of the knowledge and skills they need to become legally qualified to practice as a full-time Medical Officer of Health in Ontario (according to the provincial *Health Protection and Promotion Act* legislation).

The results of the program are hoped to be achieved with a minimum of disruption to the trainee's life, without a significant loss of service to the health unit. Where the candidate has no experience in public health practice, the sponsoring board of health may elect to have the candidate spend an orientation period of up to 6 months in the public health unit, to assess whether public health practice is suitable to the candidate. Some options available for a Master's degree include distance education (e.g. London School of Tropical Medicine and Hygiene, University of Massachusetts, and

University of Carolina). Before being granted a bursary, a candidate must submit an academic plan and receive Ministry approval for their academic plan.

Under the bursary program, the MOHLTC has committed to share the costs of salary, tuition and expenses for bursary students. The following maximum provincial levels of support apply: \$50,000 per annum salary for the six months orientation period and the up-to 22-month period of academic studies; \$3,200 per annum for tuition; and \$10,000 per candidate for travel/accommodation expenses. The cost-sharing arrangement under the bursary program, currently at 50%, will be revised to be consistent with the stepped increase for mandatory program funding.

Currently, of the 36 Ontario health units, ten boards of health do not fulfill the legal requirement under the *Health Protection and Promotion Act* to have a full-time Medical Officer of Health appointed by the Minister. All ten boards have appointed an Acting Medical Officer of Health, as is required under the provisions of the *Health Protection and Promotion Act*. Of the ten boards of health with medical officer of health vacancies, three boards of health are supporting educational upgrading of Acting Medical Officers of Health to obtain the necessary credentials for a Medical Officer of Health.

A Return-of-service agreement must be signed by the candidate and sponsoring board of health as a requirement of admission to the bursary program. Following successful completion of the masters in public health program, Return-of-service must be provided at the rate of two months of service for each month of support. Service will be returned to the sponsoring board of health. Failure to complete the course successfully or to return service will require the return of all costs plus interest.

#### *Repatriation Program*

The Ontario MOHLTC is funding training positions to recruit physicians who have completed postgraduate residency training but require up to two years of additional training to meet the certification requirements of the Royal College of Physicians and Surgeons of Canada. It was originally created to allow Canadian physicians who have trained and qualified elsewhere to return to Ontario and become qualified to practice in the same/ equivalent specialty here. This program is open to Canadian citizens or landed immigrants who are graduates of accredited Canadian, U.S., or international medical schools. Eligible candidates must receive a postgraduate training appointment to be considered for a Repatriation Program position. Candidates are advised to contact the postgraduate medical education office at one or more of the five Ontario medical schools to apply for a postgraduate residency position, and there is no stipulation on specialty type. The program requires a Return-of-service in an area approved by the MOHLTC as under-served for their specialty for a period of time equal to the length of additional Ontario training received through the program. The MOHLTC will offer assistance to physicians to obtain an employment agreement upon request.

([http://www.health.gov.on.ca/english/providers/ministry/recruit/repatriation/repatriation\\_mn.html](http://www.health.gov.on.ca/english/providers/ministry/recruit/repatriation/repatriation_mn.html))

*IMG Ontario.* The IMG Ontario program has 200 training spots in Family Medicine (100) and 14 specialties (100) at 4 Levels of Entry (6-month assessment period, Clerkship Entry, PGY1 Entry, and PGY2 Entry). Community Medicine is offered at each of these Entry Levels. Although IMGs are eligible to apply for Community Medicine training, suitable candidates do not apply every year. In 2005, well over 1000 applications have been received to the program and will undergo evaluation. In 2004, more than 200 IMGs received Assessment of Training, and 165 of these applicants went on to receive further training, including 1 in Community Medicine. IMG training is slightly more expensive per year than is usual CaRMS training, in that more teaching and closer supervision is provided. A Return-of-service of 5 years (flat) in an under-served area is required for most candidates.

([http://www.oimgc.utoronto.ca/img\\_ontario/index.htm](http://www.oimgc.utoronto.ca/img_ontario/index.htm))

## ❖ Québec

The province of Québec appears to have a more centralized but fluid/responsive process than do other provinces, in that the number and allocation of postgraduate residency training positions changes on an almost year-to-year basis, according to identified needs of the province, and is not based as squarely on "tradition" and "history" as it can be in other provinces. However, this raises a challenge to residency training programs, who cannot plan in the long-term for training (the number of positions may change from 1 to 6 in a year), so they need to be able to ramp up and down with little warning. Each year, a group comprising representatives from the Ministère de la Santé et des Services Sociaux (MSSS), Federation des Specialists, Federation des Médecins Residents du Québec (FMRQ), and universities meet to allocate residency training positions to specialties for which a need has been identified. Currently, Community Medicine (Santé Communautaire) is not identified as a priority area, and only 4 training positions were allocated to it in 2005/2006 to be spread over the 4 Québec Universities; however, it is anticipated that over the next 2 to 3 years, the allocation will increase to 8 positions.

Resident salaries are paid by the MSSS (ranging from \$36,543 (PGY1) to \$44,221 (PGY3) to \$51,601 (PGY5)), Salary does not vary by the route of entry to residency, only by the year of postgraduate training. Persons who have been deemed eligible for residency training are issued a "resident training card" by the Collège des Médecins du Québec (CMQ), which entitles them to funding for residency training which they can bring to a program for acceptance.

Infrastructure costs are paid by the Ministère de l'Éducation du Loisir et du Sport (MELSQ). No precise funding figure could be communicated for this report. Since 2001, each university receives general funding plus adjustments for some specific programs. Hence, each university receives specific funding for residents, as well as a global budget for the training of all medical residents, and the university distributes this amount between teaching hospitals. In 2004-2005, the specific funding for all 4 universities was \$18,767,900. (<http://www.mels.gouv.qc.ca/ens-sup/ftp/Regl0405.pdf> table F(6)).

*Graduating Medical Student Match Québécois.* Only McGill University enters the CaRMS match. ([http://www.carms.ca/jsp/program.jsp?path=../jsp/./program\\_new/352515](http://www.carms.ca/jsp/program.jsp?path=../jsp/./program_new/352515))

The other 3 Québec medical schools run their own internal Match Québécois for applicants graduating largely from Québec francophone medical schools.

*Re-entry.* There is currently no well-publicized mechanism for re-entry to residency training. However, physicians practicing in Québec or graduates from Québec medical schools ( i.e. the "retours de pratique"), may be considered for a special program (Contingent des cheminements particuliers) created by the Québec government. Interested persons may apply to universities for one of the Family Medicine or specialty training positions offered by this program. Sixty (60) positions were allocated in 2005. No Return-of-service is required.

Eligibility criteria are as follows:

- Canadian citizenship/permanent resident of Canada status.
- Has practiced medicine in Québec at least 6 months over the course of the past five years.
- The Collège des Médecins du Québec (CMQ) has verified the equivalence of all medical degrees issued by a Canadian medical school outside of Québec and by all American medical schools as well as all training done elsewhere in Canada and in the USA. This is required in order for the CMQ to issue the resident training card, which is necessary to train in Québec hospitals and be paid by the Ministry of Health ([http://www.med.mcgill.ca/postgrad/applicantinfo\\_mf\\_retour.htm](http://www.med.mcgill.ca/postgrad/applicantinfo_mf_retour.htm)) ([www.cmq.org](http://www.cmq.org))



Traditionally, re-entry candidates are also identified in graduate school and in practice settings, and are invited to apply for training (e.g. they are identified while taking Masters level courses in public health and epidemiology).

*IMG.* There are no formal programs for IMG residency training. Interested persons may apply to the CMQ for a training card, if they are a **Canadian citizen/permanent resident of Canada, currently residing in Québec**. The candidate will compete either with graduating medical students, or with re-entry applicants for one of the spots of the Contingent des cheminements particuliers.

<http://www.cmq.org/>).

There is a program to evaluate the training of IMGs who are interested in obtaining a license to practice in Québec, but it does not provide supplemental training.

([http://www.med.mcgill.ca/postgrad/applicantinfo\\_mf\\_candianimg.htm](http://www.med.mcgill.ca/postgrad/applicantinfo_mf_candianimg.htm))

## **6. Department of National Defence**

The Canadian Forces (CF) are excluded under the Canada Health Act and are considered to be a 14th Health Authority. They receive no direct funding for health. As such, CF members have no provincial health coverage (but their families do).

DND physician recruitment for the CF is done through financial and other incentives for licensed physicians, a program of medical school subsidies and salaries for civilian medical students, and reservation and subsidization of a total of 12 annual undergraduate positions for serving CF officers at the medical schools of the University of Ottawa, Queen's and the University of Toronto.

Currently, DND employs 9 military and 4 civilian physicians trained in and employed in health protection/community medicine (a few others received US Board Certification in occupational or preventive medicine as part of Aerospace or Hyperbaric medicine residency programs, but are employed in aviation or underwater medicine roles). The 4 civilian positions require FRCPC Community Medicine or Occupational Medicine, while the military physicians require at least 2 years of postgraduate community medicine training. FRCP requirement cannot currently be justified given the availability of advisory support from the 4 civilians and the absence of such a qualification requirement for some municipal and provincial Medical Officers of Health with populations significantly exceeding that of the CF.

Depending on projected CF expertise requirements, training may include a 2-year Canadian MHS in Community Medicine, a 3-year US residency in preventive or occupational medicine, a one-year MPH with a one-year environmental health diploma program, a 3-month diploma in occupational health and safety, a four-month diploma course in tropical medicine and hygiene, short courses in radiation emergency medical planning and response or in the clinical management of Nuclear/Biological/Chemical casualties, or combinations thereof. They are primarily employed as Occupational and Public Health physicians for the 60,000 regular and 23,000 reserve CF troops they serve, with a strong focus on health protection from the unusual environmental, industrial, public health, and weaponized threats encountered by military forces.

At each level of supported military base/unit or larger formation (up to and including the Surgeon General), the senior military physician fulfills each of the following roles:

- Senior clinical medical authority
- Medical Officer of Health
- Head of occupational health service
- Advisor to military commander on all health-related matters
- Senior medical support planner for military missions

New CF physicians complete a 6-week basic course dealing with topics such as tropical medicine, ballistic and blast trauma management, nuclear, biological, and chemical casualty management, and 1-week in Occupational Health. Among intermediate level CF physicians, 1 or 2 are selected annually for two years of postgraduate training in health protection/community medicine in order to prepare them to fill health protection appointments at the national-level CF Health Services Group Headquarters. A long-term goal is to have all of the most senior medical officers (who are not clinical specialists) obtain up to 2 years of postgraduate training in public health and occupational medicine.

A mix of training venues is sought for CF physicians, with some attending the US Uniformed Services University of the Health Sciences (USUHS) in Bethesda, Maryland and completing preventive or occupational medicine residencies or combinations of other relevant programs (such as masters or diploma programs in public health, tropical medicine and hygiene, environmental health, or medical intelligence). Some physicians complete masters-level programs in Community Medicine or Occupational Health at Canadian universities. Because exposure to and training in a wide range of military-specific or military-unique health protection topics is not available in Canada, USUHS residency training is generally preferred. CF residents in the 3-year occupational or preventive medicine programs receive one year credit due to service as military physicians, which always includes a great deal of occupational and preventive medicine. They are thus

eligible to write the American Board of Preventive Medicine exams & obtain Board-Certification after 2 years of training versus a 5-year Community Medicine FRCP. Canadian university graduates (Calgary, McGill, UBC) must generally complete some rotations with US Defence Department health protection organizations either during or after their masters programs.

Training at US Defence department health protection facilities is also sought in order that CF physicians establish contacts with and future access to the enormous health protection research, advisory, capability, and other support resources of the US Defence Department's health system. Training venues for courses and rotations outside the universities may include:

- US Army Medical Research Institute of Infectious Diseases
- US Army Medical Research Institute of Chemical Defence
- US Navy Bureau of Medicine
- US Navy Epidemiology and Preventive Medicine Units
- US Marine Corps Chemical-Biological Response Force
- US Armed Forces Radio-Biology Research Institute
- Walter Reed Army Institute of Research
- NIH Medical Center
- State/Provincial/Municipal public health authorities
- US & Canadian Private Industry
- US Defense Intelligence Agency
- US Armed Forces Medical Intelligence Center
- Pentagon Office of Health Affairs
- US Army Center for Health Promotion and Preventive Medicine
- US Centers for Disease Control & Prevention
- UK Defence Nuclear, Biological and Chemical Centre
- US Radiation Emergency Assistance Center/Training Site (REAC/TS)
- and others.

DND has special arrangements and privilege with the American military to provide such training. This arrangement has worked out very well for DND in providing highly specialized education of a high quality. The US provides the training free to Canadian candidates, and the arrangement is mutual, though rarely seized by the US.

With respect to Master's-level training at Canadian universities, each CF student individually pays their tuition, books, travel, and other expenses annually (with cash advances from DND as necessary) and is reimbursed through the military claims system. Historically, when a CF student has enrolled in a Canadian residency program, the program has accepted the student without financial compensation, but this trend is changing. It is feared that this trend, coupled with the federal requirement to obtain bids according to the PWGSC process, might result in sending DND students to train with the lowest bidder rather than where unquantifiable (but militarily critical) benefits and opportunities would be gained.

All CF students are Officers of the Canadian Armed Forces and receive their usual salaries during residency. Among other benefits, DND also pays all costs related to the move of their families to the place of study and back to their post-residency place of duty.

## **7. CaRMS Data**

### **Positions outside of CaRMS**

There are three routes to training outside of the CaRMS match:

- Securing independent or *ad hoc* funding, through the previously mentioned mechanisms:
  - university department of postgraduate medicine "floating" funding
  - special funding through health authorities who are in need of Community Medicine physicians
  - some provincial programs for re-entry or IMG trainees
- VISA students, who bring funding from their country of origin and are expected to return upon completion of training
- Department of National Defence training.

### **CaRMS Match Data**

The Canadian Resident Matching Service (CaRMS) works in cooperation with medical schools and students to provide the following services: an electronic application service and a computer match for entry into postgraduate medical training. Each year, most graduating Canadian medical school students (N = 1200+) participate in the First Iteration Match. In addition, 700 "independent" applicants compete for the approximately 200 positions available in the Second Iteration Match. Independent applicants include former graduates of Canadian medical schools, U.S students, and graduates of international medical schools. CaRMS provides an orderly way for applicants to decide where to train and for program directors to decide which applicants they wish to enrol in postgraduate medical training. On average, a graduating medical student applies to at least 12 programs in at least 2 disciplines.

([http://www.carms.ca/jsp/program.jsp?path=../jsp/./program\\_new/quota/qcommed](http://www.carms.ca/jsp/program.jsp?path=../jsp/./program_new/quota/qcommed))

Community Medicine is considered a "small discipline", as the number of positions are relatively few. The National Specialty Society for Community Medicine (NSSCM) plans to collate and analyze this data on an annual basis.

#### **1993 – 2004.**

Data in tabular format are available for the years 1993 – 2004 (see [Table 7](#) and [Table 8](#) below). This data clearly indicate that the popularity of Community Medicine residency has risen dramatically over this time. More students, both in number and proportion, are applying to Community Medicine, and more are ranking it as their first choice specialty. The number of graduating medical students applying to Community Medicine rose from 39 to 96 over 1993-2004, and the proportion ranking it as their *first choice* rose from 0.8 per 1000 CaRMS applicants in 1993, to a high of 8.9 per 1000 in 2001. Similarly, the rate of applicants ranking Community Medicine as a potential choice in their final rankings rose four-fold, from 10.0 per 1000 in 1993 to 42.8 in 2004. The number of students participating in the annual CaRMS match has ranged from a nadir of 1,070 (1995) to 1,285 (2004). The number of Community Medicine residency positions available in that time period has more than doubled, from a low of 5 (1994) to 11 (2004). The majority (80%) of the applicants who rank Community Medicine first are matched to Community Medicine, and most frequently to the particular Community Medicine program that they ranked first. However, in several years (1995, 1998-2001, 2004), some of these applicants matched to another discipline or were unmatched. Note that in 6 of 12 years, several applicants who ranked Community Medicine as their first choice were not matched to Community Medicine programs, and in 4 of these years, a Community Medicine position was actually given away by a program (perhaps indicating that the applicants were not judged by the program to be suitable). [Table 8](#) shows the matching history for each Community Medicine program that has participated in CaRMS in one or more of the years 1993-2004. Some programs more consistently match their positions in the first iteration of the match (e.g. McMaster, Toronto, McGill), while others (e.g. UBC) tend to match during the 2<sup>nd</sup> iteration. This may be due to the preference of the program for graduating versus re-entry candidates, as well as perhaps the popularity of the program amongst applicants.

**2005.**

Data for the 2005 match (for residency positions beginning July 1<sup>st</sup> 2005) are presented separately, as CaRMS has not yet summated it with previous years. Twelve (12) Community Medicine positions were available in the 2005 match, and three of these were unmatched in the first iteration: 1 at UBC, 1 at University of Calgary, and 1 at University of Manitoba. Each of these 3 positions entered the 2<sup>nd</sup> match, and subsequently were matched (one was matched to an IMG applicant). As noted previously, some programs, such as UBC, sometimes prefer to have positions filled with re-entry physicians, through the 2<sup>nd</sup> match. Ten (10) applicants ranked Community Medicine as their first choice discipline (7/1000 applicants), and 9 of these matched to Community Medicine programs in the 1<sup>st</sup> iteration. Two (2) applicants applied only to Community Medicine programs.

[Table 9](#) shows the frequency with which applicants ranked various of the “small disciplines”, including Community Medicine, as their first choice (“Discipline of Choice”), and the medical school from which they were graduating.

[Table 10](#) shows the gender of applicants to various of the small disciplines, including Community Medicine. For those who ranked Community Medicine as their 1<sup>st</sup> choice, 7 of 10 applicants were female, and 3 were male.

[Table 11](#) displays the results of the 2<sup>nd</sup> iteration of the 2005 match for Canadian graduates and IMGs respectively.

**Table 7. Match Results for Community Medicine (CM), 1993-2004 CaRMS match, First Iteration.**

Year	# of CM Positions	# CaRMS Applicants	# of CM Applications	# of Times CM Ranked by Applicants (Rate per 1000)**	# of Applicants Ranking CM as 1 <sup>st</sup> choice (Rate per 1000)***	Applicant Matched to 1 <sup>st</sup> Choice CM Program	Applicant Matched to other CM Program	Applicant Matched to Another Discipline	Applicant Unmatched	Positions Filled on 1 <sup>st</sup> Iteration	Positions Filled on 2 <sup>nd</sup> Iteration	Positions Vacant after 2 <sup>nd</sup> Iteration	# of CM Rankings by # of Positions
2004	11*	1285	96	55 (42.8)	6 (4.7)	5/6			1/6	7	3		5.00 (55/11)
2003	7	1231	54	30 (24.4)	3 (2.4)	3/3				5	2		4.29 (30/7)
2002	9*	1117	52	25 (22.4)	2 (1.7)	2/2				4	4		2.78 (25/9)
2001	9*	1130	65	42 (37.2)	10 (8.9)	5/10	1/10	4/10		6	2		4.67 (42/9)
2000	9*	1154	73	52 (45.1)	6 (5.2)	3/6	2/6	1/6		6	1	1	5.78 (52/9)
1999	8	1149	77	46 (40.0)	8 (7.0)	6/8		2/8		6	2		5.75 (46/8)
1998	9*	1172	85	44 (37.5)	10 (8.5)	5/10	1/10	3/10	1/10	6	1	1	4.89 (44/9)
1997	8*	1169	62	23 (19.7)	3 (2.6)	3/3				3	4		2.88 (23/8)
1996	10	1268	52	12 (9.5)	5 (3.9)	5/5				5	1	4	1.20 (12/10)
1995	9	1070	74	41 (38.3)	7 (6.5)	5/7	1/7	1/7		6	3		4.56 (41/9)
1994	5	1207	59	13 (10.8)	3 (2.5)	3/3				4	0	1	2.60 (13/5)
1993	6	1301	39	13 (10.0)	1 (0.8)	1/1				1	2	3	2.17 (13/6)
<b>Total</b>	100 (94 after reversion)				64	46/64	5/64	11/64	2/64	59	25	10	

\* Reversion = during running of the 1<sup>st</sup> iteration, if a position will be unfilled, and the program predicts it will not be filled with a suitable applicant in the 2<sup>nd</sup> iteration, they may choose allow it to “revert” to another discipline within that school (the “receiving” program) for use in the first iteration. The position is temporarily removed for that year from the “donating” program. In each of the years marked \*, 1 CM position reverted to another discipline.

\*\* Numerator = the total number of CaRMS applicants who ranked a CM program as a choice for residency training

Denominator = the total number of persons entered into the CaRMS match for that year (see column “# CaRMS Applicants”).

\*\*\* Numerator = number of CaRMS applicants who ranked a CM program as their 1<sup>st</sup> choice

Denominator = the total number of persons entered into the CaRMS match for that year (see column “# CaRMS Applicants”).

Note: the data for the years 1994-2002 may not be as accurate as data for 2003 & 2004, which were electronically recorded through a new application system. For the years 1994-2002, there may have been more applicants per year than officially recorded, as some students may have sent late applications directly to the program(s) after CaRMS deadlines. These extra applicants are known only to the programs.

Source: adapted from a report of the National Specialty Society for Community Medicine, “Community Medicine and its “competitiveness” in the annual residency match, CaRMS 1993 – 2004”, prepared with CaRMS data.

**Table 8. Match History of Canadian Community Medicine Programs, 1993-2004\*.**

Year	All Programs	Alberta	U.B.C.	Calgary	Manitoba	McMaster	McGill	Ottawa	Toronto
2004**	10-7-3-0	1-1-0-0	2-0-2-0	1-0-1-0	1-1-0-0	1-1-0-0	1-1-0-0		3-3-0-0
2003	7-5-2-0		1-0-1-0	1-1-0-0	1-0-1-0	1-1-0-0			3-3-0-0
2002**	8-4-4-0		3-0-3-0	1-0-1-0			1-1-0-0		3-3-0-0
2001**	8-6-2-0		3-1-2-0	1-1-0-0	1-1-0-0				3-3-0-0
2000**	8-6-1-1		2-0-1-1	1-1-0-0	1-1-0-0		1-1-0-0		3-3-0-0
1999	8-6-2-0		2-1-1-0	1-0-1-0		1-1-0-0	1-1-0-0		3-3-0-0
1998**	8-6-1-1		1-0-1-0	1-1-0-0	2-1-0-1	1-1-0-0			3-3-0-0
1997**	7-3-4-0		2-0-2-0	1-0-1-0		1-1-0-0			2-1-1-0
1996	10-5-1-4			2-0-1-1	1-0-0-1	1-1-0-0		2-0-0-2	3-3-0-0
1995	9-6-3-0			2-1-1-0	2-0-2-0			2-2-0-0	3-3-0-0
1994	5-4-0-1						1-1-0-0	1-1-0-0	4-3-0-1
1993	6-1-2-3					1-0-0-1	1-1-0-0	1-1-0-0	4-0-2-2
<b>Total</b>	<b>94-59-25-10</b>	<b>1-1-0-0</b>	<b>16-2-13-1</b>	<b>12-5-6-1</b>	<b>9-4-3-2</b>	<b>7-6-0-1</b>	<b>6-6-0-0</b>	<b>6-4-0-2</b>	<b>37-31-3-3</b>

Note: \*Each series of four numbers correspond to: # of positions available - # matched in 1st iteration - #matched in 2nd iteration - # unmatched.

\*\*The # positions available reflects the total *after* removal of positions destined to be unmatched (reversion). In \*\* years, 1 CM position reverted to another discipline.

Source: adapted from a report of the National Specialty Society for Community Medicine, "Community Medicine and its "competitiveness" in the annual residency match, CaRMS 1993 – 2004", prepared with CaRMS data.

**Table 9. Discipline Choice of Canadian Graduates by Medical School and Discipline, 2005 Match First Iteration\***

Small Disciplines*	% Total Overall Quota	Memorial		Dalhousie		McGill		Ottawa		Queens		Toronto		McMaster		Western		Manitoba		Sask		Alberta		Calgary		UBC		% Overall First Choice
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Community Medicine	0.8%	-	-	1	1.1	-	-	-	-	1	1.1	2	1.1	2	1.5	1	0.8	1	1.3	-	-	-	-	2	2.1	-	-	0.7%
Dermatology	0.4%	1	1.8	2	2.3	2	2.0	-	-	-	-	2	1.1	2	1.5	-	-	-	-	1	1.8	1	0.8	2	2.1	2	1.5	1.1%
Medical Biochemistry	0.07%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	
Medical Genetics	0.4%	-	-	-	-	-	-	-	-	1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1%	
Medical Microbiology	0.07%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	
Nuclear Medicine	0.3%	-	-	-	-	1	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1%	
Occupational Medicine	0.1%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	
Rehabilitation Medicine	1.0%	-	-	-	-	-	-	1	0.9	2	2.3	4	2.1	1	0.7	4	3.3	-	-	1	1.8	-	-	-	-	-	0.9%	
Radiation Oncology	1.4%	1	1.8	1	1.1	2	2.0	5	4.4	-	-	1	0.5	-	-	3	2.5	1	1.3	-	-	4	3.1	3	3.1	-	1.5%	
<b>Total</b>	<b>4.5%</b>	<b>2</b>	<b>3.6</b>	<b>4</b>	<b>4.5</b>	<b>5</b>	<b>5.0</b>	<b>6</b>	<b>5.3</b>	<b>4</b>	<b>4.5</b>	<b>7</b>	<b>4.8</b>	<b>5</b>	<b>3.7</b>	<b>8</b>	<b>6.6</b>	<b>2</b>	<b>2.6</b>	<b>2</b>	<b>3.6</b>	<b>5</b>	<b>3.9</b>	<b>7</b>	<b>7.3</b>	<b>3</b>	<b>2.3</b>	<b>4.4%</b>

Note: \*These disciplines are considered "small" in that there are relatively few positions available.

Source: 2005 CaRMS Match data, [http://carms.ca/jsp/main.jsp?path=../content/statistics/report/re\\_2005](http://carms.ca/jsp/main.jsp?path=../content/statistics/report/re_2005)

**Table 10. Discipline Choice and Match Results of Canadian Graduates By Gender, 2005 Match First Iteration.**

Small Disciplines	Female				Male			
	Discipline Choice		Match Results		Discipline Choice		Match Results	
	#	%	#	%	#	%	#	%
Community Medicine	7	0.9	6	0.8	3	0.5	3	0.5
Dermatology	10	1.3	3	0.4	5	0.8	3	0.5
Medical Biochemistry	-	-	-	-	-	-	-	-
Medical Genetics	2	0.3	2	0.3	-	-	-	-
Medical Microbiology	-	-	-	-	-	-	-	-
Nuclear Medicine	-	-	-	-	1	0.2	1	0.2
Occupational Medicine	-	-	-	-	-	-	-	-
Rehabilitation Medicine	5	0.6	4	0.5	8	1.3	8	1.3
Radiation Oncology	4	0.5	4	0.5	17	2.7	16	2.6
<b>Total</b>	<b>28</b>	<b>3.6</b>	<b>19</b>	<b>2.5</b>	<b>34</b>	<b>5.5</b>	<b>31</b>	<b>5.1</b>

Note: \*These disciplines are considered "small" in that there are relatively few positions available.

Source: 2005 CaRMS Match data, [http://carms.ca/jsp/main.jsp?path=../content/statistics/report/re\\_2005](http://carms.ca/jsp/main.jsp?path=../content/statistics/report/re_2005)

**Table 11. Match Results by Discipline for Canadian Graduates and IMGs, 2005 Match Second Iteration.**

Discipline (Vacancies)	Canadian Graduates	IMGs	Discipline	Canadian Graduates	IMGs
Anatomical Pathology (3)	1	2	Neurology (1)	1	
Community Medicine (3)	2	1	Neurosurgery (5)	3	1
Family Medicine (109)	40	54	Nuclear Medicine (1)	1	
General Pathology (1)		1	Obstetrics/Gynecology (4)		4
General Surgery (2)	3		Occupational Medicine (2)		2
Internal Medicine (3)	3		Orthopedic Surgery (3)	1	1
Laboratory Medicine (4)	2		Pediatrics (2)	2	
Medical Genetics (2)		2	Rehabilitation Medicine (3)	1	2
Medical Microbiology (1)	1		Psychiatry (15)	4	10
<b>Total</b>				<b>65</b>	<b>80</b>

Source: 2005 CaRMS Match data, [http://carms.ca/jsp/main.jsp?path=../content/statistics/report/re\\_2005](http://carms.ca/jsp/main.jsp?path=../content/statistics/report/re_2005)



## **8. Conclusion**

The current landscape of Community Medicine residency training in Canada is changing, though not as quickly as is needed to meet the needs of Canadians and their public health systems.

Residency program directors feel that they have a demand for training positions that outstrips their current allocation of spots, particularly with respect to re-entry of practicing physicians. CaRMS data give an excellent indication of the desire for graduating medical students to train in Community Medicine. These data delineate a trend to increasing popularity of Community Medicine as a discipline, as the rate of applications to Community Medicine programs has increased quite dramatically since 1993. However, relatively few residents rank Community Medicine as their first choice discipline. This likely belies a discomfoting unfamiliarity with the career paths of Community Medicine graduates, and perhaps with the residency program itself. Further investigation of these trends would be worthwhile – for example, to more fully comprehend why students may apply to Community Medicine programs, but subsequently not rank them, PHAC should survey both graduating medical students and applicants to Community Medicine programs – as this type of survey has not yet been performed. Prior discussion with applicants and residents has revealed that they often are unwilling to turn their backs on clinical medicine, particularly as they exit medical school, and are much more likely to choose Community Medicine as their specialty if they are given the opportunity to pursue a CCFP, and to continue to practice clinical medicine throughout residency training. Indeed, a survey of Community Medicine practitioners (especially recent ones) would likely reveal a similar desire to integrate some aspects of clinical medicine into their public health practice. Many programs initially were reluctant to offer the trainees the option of receiving a CCFP, as they worried that their program would become a “back door” to Family Medicine training, and that once achieving the CCFP, residents would quit the program. Thankfully, experience has not borne this out at all, and the vast majority of trainees who pursue a CCFP complete their FRCPC in Community Medicine. Moreover, program directors are impressed by the caliber and diversity in academic/occupational background and career interests of their applicants and residents.

It should be noted that for several reasons, CaRMS data do not give a complete picture of either the demand for or the actuality of residency training. First, only graduating medical students can apply to the 1<sup>st</sup> iteration of the match. Re-entry and IMG physicians who may be very suitable candidates for further training in Community Medicine may apply only to those positions which are carried into the second match – there may be more demand for Community Medicine training by re-entry and IMG applicants than there are positions to apply for. Second, interviews with residency programs and provincial health authorities substantiate that entry to residency training occurs outside of the CaRMS match, through various *ad hoc* and separate streams, although the extent of this trend currently is difficult to quantify. It is clear that residency programs feel that the opportunities for re-entry are inadequate. With that sentiment noted, it is also evident that most practicing physicians are similarly unaware of residency in Community Medicine and subsequent career paths, as well as routes to re-entry. Clearly, many opportunities exist for promotion of the specialty, and attention should be focused here.

Although this project has identified many interesting trends and nuances of residency training in Canada, the most relevant and pressing are the need for increased capacity for re-entry training, the need for increased collaboration between residency programs and public health agencies across the country, and the need for concerted effort at promotion and recruitment.

**Appendix A.**

**Table 12. Undergraduate Medical Students Graduating from Canadian Medical Schools, 2005 (n)\***

	BC	AB	SK	MB	ON	QC	NS	NL
<b>Positions</b>	132	232 128 (U of A) 104 (U of C)	57	85	673 125 (Western) 142 (McMaster) 193 (U of T) 89 (Queen's) 124 (Ottawa)	567 137 (McGill) 176 (U Montréal) 114 (Sherbrooke) 140 (Laval)	89	63
<b>Trend</b>	↑↑	↑	↑	↑	↑	↑	?	?
<b>Total Canadian Undergraduates</b>			<b>1897</b>					

Source: compiled from CaRMS data, provincial ministries of health, and medical schools.

\*Note: this table contains estimates of the number of undergraduate positions, and does vary from year to year.

## **Appendix B.**

### **CAPER Reports.**

The Canadian Post-MD Education Register (CAPER) is an organization that manages a website containing a wealth of information regarding the Canadian landscape of postgraduate residency training. The following information is taken from their website ([www.caper.ca](http://www.caper.ca)).

CAPER (The Canadian Post-M.D. Education Registry) was established in 1986 through the co-operation of national medical organizations with an interest in the post-M.D. clinical education of physicians in Canada (e.g. internship and residency).

The following organizations are the participating organizations of CAPER. Together they have developed CAPER. They are represented on the Executive Committee of CAPER and establish the policy framework for CAPER. They support CAPER financially and they give advice and expertise required for the operation of CAPER.

- The Association of Canadian Medical Colleges
- Canadian Association of Interns and Residents
- Canadian Medical Association
- College of Family Physicians of Canada
- Medical Council of Canada
- Health Canada
- Royal College of Physicians and Surgeons of Canada.

CAPER is incorporated within the by-laws of The Association of Canadian Medical Colleges with the mandate to provide accurate information which may be used for medical human resource planning on a national basis. To accomplish this task, an individual longitudinal file is maintained containing socio-demographic information and details of the current and past training programs of each resident or fellow under the supervision of the Canadian faculties of medicine on November 1<sup>st</sup> of each year.

Included here are excerpts from CAPER's "Quick Facts". The website also presents many graphical displays of this information. ([http://www.caper.ca/Presentations/2004\\_2005\\_quick\\_facts.pdf](http://www.caper.ca/Presentations/2004_2005_quick_facts.pdf))

#### **Quick Facts 2004-2005**

##### **1. Quick Facts: Concerning Canadian Citizens/Permanent Residents**

The majority in this group are graduates of Canadian Faculties of medicine, but International Medical Graduates who are Canadian citizens or permanent residents of Canada are also included in the following figures. International Medical Graduates who are Canadian citizens now account for 15% of this cohort.

A. Entry to post-M.D. training has increased as a result of the larger number of Canadian M.D. graduates in 2004 and also due to an increase in the number of IMGs at this level. The number of first year Canadian citizens/permanent residents has increased to 1929. The number of Canadian-citizen first year trainees started to increase in 2002-03 and will continue in line with the number of undergraduate M.D. students.

B. Both the number and proportion of International Medical Graduates (Canadian citizen/permanent resident) entering the first year of post-M.D. training have increased to 289 trainees which is 15% of the entry group.

C. Gender. The proportion of women in medicine has been steadily increasing. In 2004-05, 56% of the Canadian citizen/permanent resident physicians entering training were female. When we consider physicians completing training in 2004, 60% of the new Family physicians were female and 44% of new specialists were women.

D. Specialty mix at entry to and exit from post-M.D. training. In 2004/05, 39% of the first year trainees were in Family medicine. This proportion has been relatively stable over the past 5 years although the number of physicians entering training in both Family medicine and specialty training has started to increase. The proportion of Family physicians in the exit cohort in 2004 was also 38%.

##### **2. Quick Facts: Concerning Post-M.D. Trainees in Regular Ministry Funded Positions**

A. The total number of regular ministry funded trainees has continued to increase to 7317. There has been a similar increase in the **total** number of post-M.D. trainees nationally (ministry and non-ministry funded) to 10,020. The reasons for the increase in both sectors are that the number of Canadian medical graduates has started to increase and the number of International Medical Graduates has also continued to increase.

B. The number of ministry funded graduates of Canadian medical schools has increased as we are seeing the effect of the increased number of physicians graduating from Canadian medical schools (1663 in 2003 up to 1756 in 2004 according to AFMC data).

C. The number of current year Canadian medical graduates in post-M.D. training has increased sharply this year up to 1600 graduates. The increase in the number of graduates in 2004 is the reason behind this increase.

D. The number of re-entry trainees has remained the same as the previous year.

E. The number of ministry funded Family medicine trainees choosing to take an additional year has continued to increase to 179 trainees. This proportion is 27% of the 667 R-2 Family medicine trainees in 2004-2005. The proportion of R-4 trainees in subspecialty training has dropped slightly to 21% of the R-4 trainees.

### 3. Quick Facts: Concerning Non-Ministry Funded Post-M.D. Trainees 1995-1996 to 2004-2005

A. From 1995 to 2004, there has been a steady increase in the number of non-ministry funded trainees from 1478 in 1995 to 2703 in 2004.

B. Within the resident category of non-ministry funded trainees, the number of Canadian graduate trainees has increased slightly this year. The number of IMG non-ministry funded residents has continued to increase. These IMG residents are funded mainly from contracts with foreign governments.

C. The number of non-ministry funded Canadian M.D. graduate fellows has remained stable this year.

D. There has been a decrease to 35 non-ministry funded re-entry trainees.

E. The number of non-ministry funded visa trainees has increased greatly from 1995-1996 to 2004-2005. This 140% increase in visa trainees over the last 10 years is the main factor in the increase in the number of non-ministry funded trainees.

**Table 13. Community Medicine Training Positions by Medical School, 2004-2005.**

Faculty of Medicine Providing Post-M.D. Training in Community Medicine	Rank of Trainee						Total
	PGY-1	PGY-2	PGY-3	PGY-4	PGY-5	Fellow	
Memorial University							
Dalhousie University							
Université Laval	1	2	1		2		6
Université de Sherbrooke		2		2	1		5
Université de Montréal	1	2	1	3	3		10
McGill University			1		1		2
University of Ottawa							
Queens University							
University of Toronto	3	4	4	4	2		17
McMaster University	1				2		3
University of Western Ontario							
University of Manitoba			1	1	3		5
University of Saskatchewan							
University of Alberta	1			1			2
University of Calgary	1	1	1	2	1	1	7
University of BC	2	2	3	3	2		12
Total	10	13	12	16	17	1	69

Source: <http://www.caper.ca/Pages/DTablesCY-Individual-MedicalSpecialties.html>

**Table 14. National Summary, 2004-2005 Post-M.D. Trainees (Regular Ministry-Funded Positions).**

Field of Post-M.D. Training		Residents						Total*	Re-entry**	Visa	
		PGY-1	PGY-2	PGY-3	PGY-4	PGY-5	PGY-6				PGY-7
<b>FAMILY MEDICINE</b>	Family Medicine	798	692						<b>1490</b>	11	7
	Emergency Medicine (CFPC)			100					<b>100</b>	8	
	Care of the Elderly (CFPC)			8					<b>8</b>	2	
	Enhanced Skills: Other Family Medicine Training			71					<b>71</b>	19	3
	<b>FAMILY MEDICINE SUBTOTAL</b>	798	692	179					<b>1669</b>	40	10
<b>TRAINING FOLLOWING F.M. OR SPEC.</b>	Palliative Medicine			9		1	2	1	<b>13</b>	3	
	<b>TRAINING FOLLOWING F.M. OR SPEC. SUBTOTAL</b>			9		1	2	1	<b>13</b>	3	
<b>MEDICAL SPECIALTIES</b>	Anesthesia	93	96	91	94	94	2		<b>470</b>	13	1
	Critical Care (Anes.)						3		<b>3</b>		
	<b>Community Medicine</b>	10	13	11	15	16			<b>65</b>	12	
	Dermatology	10	9	10	12	6	1		<b>48</b>	6	3
	Diagnostic Radiology	65	80	71	68	68	12	1	<b>365</b>	14	3
	Pediatric Diagnostic Radiology						1		<b>1</b>		
	Emergency Medicine (RCPSC)	28	26	32	23	32			<b>141</b>	2	1
	Critical Care (Emergency Med.)						1		<b>1</b>		
	Pediatric Emergency Medicine				4	3			<b>7</b>		
	Internal Medicine	301	255	236	35	6			<b>833</b>	7	4
	Cardiology (Int.Med.)				43	39	42	3	<b>127</b>	2	2
	Clin. Imm./Allergy (Int.Med.)				2	1			<b>3</b>		
	Clin. Pharmacology (Int.Med.)					2			<b>2</b>		
	Critical Care (Int.Med.)				7	15	8		<b>30</b>	1	
	Endocrinology/Met. (Int.Med.)				10	15	3		<b>28</b>		
	Gastroenterology (Int.Med.)				20	29	5		<b>54</b>	1	
	Geriatric Medicine (Int.Med.)				4	6			<b>10</b>		
	Hematology (Int.Med.)				17	18	1	1	<b>37</b>		
	Infectious Diseases (Int.Med.)				11	8			<b>19</b>		
	Medical Oncology (Int.Med.)				13	16	5		<b>34</b>	1	
	Nephrology (Int.Med.)				26	33	1	2	<b>62</b>		
	Respirology (Int.Med.)				15	25	1		<b>41</b>		
	Rheumatology (Int.Med.)				9	4			<b>13</b>		
	Medical Genetics	7	5	6	6	2			<b>26</b>	2	
	Neurology	23	31	22	26	23	1		<b>126</b>	1	4
	Neurology (Pediatrics)	3	4	5	6	7			<b>25</b>		
	Nuclear Medicine	6	6	4	8	3	1	1	<b>29</b>	1	
	Occupational Medicine	2	3		1	2			<b>8</b>		
	Pediatrics	103	100	89	50	12			<b>354</b>	4	4
	Cardiology (Ped.)				2	3	4		<b>9</b>	2	
	Clin. Imm./Allergy (Ped.)				1	2			<b>3</b>		
	Critical Care (Ped.)				5	6	1		<b>12</b>		
	Endocrinology/Met. (Ped.)					5			<b>5</b>		1
Gastroenterology (Ped.)				1	2			<b>3</b>			
Pediatric Emergency Med. (Ped.)				3	6			<b>9</b>		1	
Hematology/Oncology (Ped.)				1	5			<b>6</b>			
Infectious Diseases (Ped.)					3			<b>3</b>			
Neonatal-Perinatal Med. (Ped.)				2	2	1		<b>5</b>			
Nephrology (Ped.)				3	4			<b>7</b>			
Respirology (Ped.)					2			<b>2</b>			
Rheumatology (Ped.)							1	<b>1</b>			

	Physical Medicine & Rehab.	16	10	14	20	8			<b>68</b>	1	
	Psychiatry	129	108	89	109	106	3		<b>544</b>	23	2
	Radiation Oncology	29	31	25	26	19			<b>130</b>	4	3
	<b>MEDICAL SPEC. SUBTOTAL</b>	<b>825</b>	<b>777</b>	<b>705</b>	<b>698</b>	<b>658</b>	<b>98</b>	<b>8</b>	<b>3769</b>	<b>97</b>	<b>29</b>
<b>LAB MEDICINE SPECIALTIES</b>	Laboratory Med. (Undifferentiated)	5	2						<b>7</b>		
	Anatomical Pathology	21	29	25	21	21	1		<b>118</b>	4	3
	General Pathology	12	10	10	9	2			<b>43</b>	3	
	Hematological Pathology	1	5	2	5	1			<b>14</b>		
	Medical Biochemistry	2	2	3	1	5			<b>13</b>		1
	Medical Microbiology	6	9	4	4	5	1		<b>29</b>		
	Neuropathology	1	2	1	2	1			<b>7</b>	1	
	<b>LAB. MED. SPEC. SUBTOTAL</b>	<b>48</b>	<b>59</b>	<b>45</b>	<b>42</b>	<b>35</b>	<b>2</b>		<b>231</b>	<b>8</b>	<b>4</b>
<b>SURGICAL SPECIALTIES</b>	Cardiac Surgery	6	5	7	9	10	11		<b>48</b>	4	
	Thoracic Surgery (Cardiac Surg.)							1	<b>1</b>	1	
	General Surgery	123	107	82	59	74	10		<b>455</b>	5	7
	Colorectal Surgery						3		<b>3</b>		
	Critical Care (Surgery)					1	4	4	<b>9</b>		
	Gen. Surgical Oncology						1		<b>1</b>		
	Pediatric General Surgery						6	4	<b>10</b>	1	2
	Thoracic Surgery						5	4	<b>9</b>		
	Vascular Surgery						5	2	<b>7</b>		
	Neurosurgery	16	20	17	10	12	14		<b>89</b>	3	
	Obstetrics/Gynecology	68	78	60	65	51	2		<b>324</b>	4	3
	Gyn. Oncology							1	<b>1</b>		
	Gyn.Rep.Endocrin./Infertility						2		<b>2</b>		
	Maternal-Fetal Med. (Ob.)						1	1	<b>2</b>		
	Ophthalmology	24	24	30	25	26	1		<b>130</b>		3
	Otolaryngology	17	17	22	24	24			<b>104</b>		
	Orthopedic Surgery	52	55	49	50	42	2		<b>250</b>	3	6
Plastic Surgery	14	14	16	18	17			<b>79</b>	2	4	
Urology	21	20	23	20	27			<b>111</b>		2	
	<b>SURGICAL SPEC. SUBTOTAL</b>	<b>341</b>	<b>340</b>	<b>306</b>	<b>280</b>	<b>284</b>	<b>67</b>	<b>17</b>	<b>1635</b>	<b>23</b>	<b>27</b>
<b>Total</b>		<b>2012</b>	<b>1868</b>	<b>1244</b>	<b>1020</b>	<b>978</b>	<b>169</b>	<b>26</b>	<b>7317</b>	<b>171</b>	<b>70</b>

\* Total includes Re-entry and Visa trainees.

\*\* Re-entry trainees as designated by CAPER across all rank levels. Re-entry Post-M.D. trainees have had a break in post-M.D. training of 2 years or more.

Source: <http://www.caper.ca/Pages/DTablesCY-NationalSummary.html>

**Appendix C.**

**Membership Survey of the Royal College of Physicians and Surgeons of Canada (RCPSC), 2004.**

According to the 2004 RCPSC Membership Survey, there are 347 Community Medicine specialists in good standing with the RCPSC: 143 women and 204 men. Of these, 21 reside outside of Canada and 326 are currently residing in Canada as follows:

43 in BC	125 in Ontario	0 New Brunswick	1 NWT
27 in Alberta	100 in Québec	6 Nova Scotia	0 Nunavit
5 in Saskatchewan		0 PEI	0 Yukon
17 in Manitoba		2 Newfoundland	
92 in Western Canada	225 in Central Canada	8 in Atlantic Canada	1 in Northern Canada

In addition, the RCPSC has 39 “Public Health” Fellows in good standing, 6 women and 33 men (1 in QC, 7 in ON, 5 in AB, 21 in BC, and 5 residing outside of Canada).

[Table 15](#) details the age bracket of Community Medicine fellows by gender. A large majority (74%) of fellows are in the age brackets of under 45 to 54 years. Approximately 23% are aged 55-64 years old, and may be nearing retirement. Of note, more than half (56%) of fellows less than 45 years old are women, and may be likely to take some time off full-time employment for maternity leave (and more men are beginning to exercise paternity leave).

The 39 Public Health fellows are in the older age brackets, with 4 aged 55-64 and 35 older than 65 years.

**Table 15. Number and Percent of Community Medicine Fellows by Age Bracket and Gender, 2004.**

	Age Bracket, N (%)				
	under 45	45-54	55-64	65 and over	Total
Female	58 (17)	59 (17)	26 (8)	0 (0)	143 (41)
Male	46 (13)	95 (27)	53 (15)	10 (3)	204 (59)
Total	104 (30)	154 (44)	79 (23)	10 (3)	347 (100)

**Appendix D.**

**Questionnaires**

**Residency Training Program Questionnaire**

- How long have you had a Community Medicine Residency Program? \_\_\_\_\_
- How many training positions do you have per year (by type)? \_\_\_\_\_
  - has there been a recent increase or decrease in the number of positions? \_\_\_\_\_
- Do you know how many applicants applied to your program in the last few years? \_\_\_\_\_
  - How many were interviewed? \_\_\_\_\_
- How many positions were matched on the first match? \_\_\_\_\_
  - Did you match/fill all your positions? \_\_\_\_\_
  - Do you feel that your program could match more positions than it has? \_\_\_\_\_
- What is your priority/guiding principle when choosing a resident? \_\_\_\_\_
- In general, what proportion of your trainees are entering your program:  
directly from medical school (i.e. new graduates)? \_\_\_\_\_  
transferring in from other residency programs? \_\_\_\_\_  
from practice in the community (i.e. re-entry physicians)? \_\_\_\_\_  
as International Medical Graduates – IMGs? \_\_\_\_\_  
In general, how long is the training period for each type?
- How are your training positions funded? \_\_\_\_\_
  - Is the mechanism or amount of funding different for different types of resident?
  - What is the salary range?
- Does the program itself receive funding for any position? \_\_\_\_\_
- In the past few years, what proportion of residents actually complete their training? \_\_\_\_\_
- Do you know the proportion of residents who graduate from your program who ultimately practice in the area of “Public health” proper? (e.g. Public Health Units, Provincial/Territorial, Federal Ministries of Health and related agencies)? \_\_\_\_\_
- What is the usual composition of your residency program?  
rotating clinical year?  
family medicine (as a block of 2 years, or longitudinally throughout residency)?  
masters degree in \_\_\_\_\_ (thesis, non-thesis, length)?  
rotations?  
do residents pay tuition during masters degree?
- Do you require/ encourage/ allow trainees to do rotations outside of the city? \_\_\_\_\_
  - In other provinces? \_\_\_\_\_
- Do you feel that your program has the current capacity to take on extra residents? \_\_\_\_\_
  - How many? \_\_\_\_\_
- Are there any recommendations you have for optimizing the capacity for residency training?
- If funding were available (e.g. from the Public Health Agency of Canada) for extra training positions/ incentives, how do you think it should be delivered?  
e.g. as scholarships, bursaries, fellowships, a separate stream?
  - should funding be funneled through the residency program, or through another agency such as PHAC or the RCPSC?
  - Other thoughts for increasing capacity to train Community Medicine specialists?



## Provincial Ministry of Health Questionnaire

- Determine how each province (Ministry of Health) decides how many Community Medicine positions they will fund,
- How much funding do you allocate to each spot?
  - resident salary?
  - for university department?
- Does this vary with the type of position?
- what is the policy on re-entry physicians?
  - Is return-of service required?
- on IMGs?
  - Is return-of service required?
- is there potential to augment salaries to attract re-entry physicians?
- Do you know if the Ministry provides funding for Master degree in science/health science?
- If funding were available (e.g. from the Public Health Agency of Canada) for extra training positions/ incentives, how do you think it should be delivered?  
e.g. as scholarships, bursaries, fellowships, a separate stream?
  - should funding be funneled through the residency program, or through another agency such as PHAC or the RCPSC?

Other things?

Do you think these are useful questions?