

# CaRMS Forum

## 2017 R-1 Main Residency Match Outcomes and insights

April 30, 2017



# R-1 match



Match overview



Program application  
the program perspective



CMG choices



Supply and demand



IMG results

Unmatched and unfilled

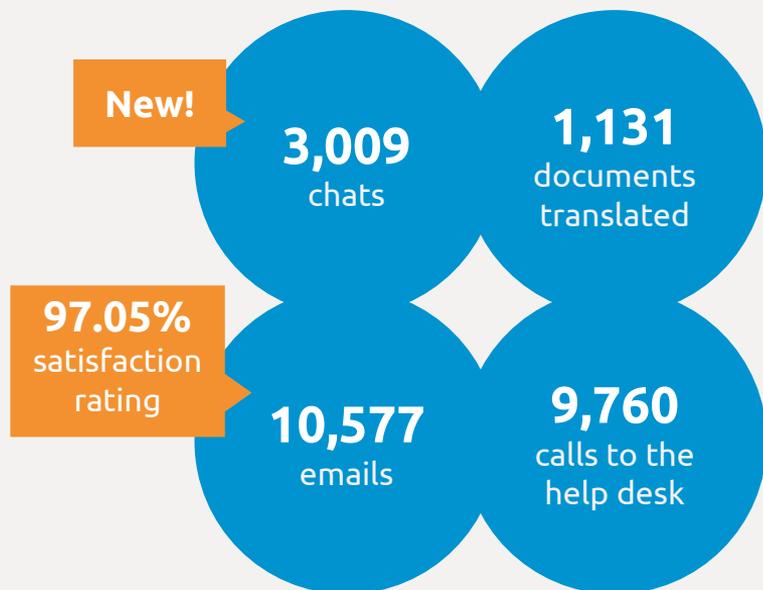


# Match overview

# CaRMS by the numbers

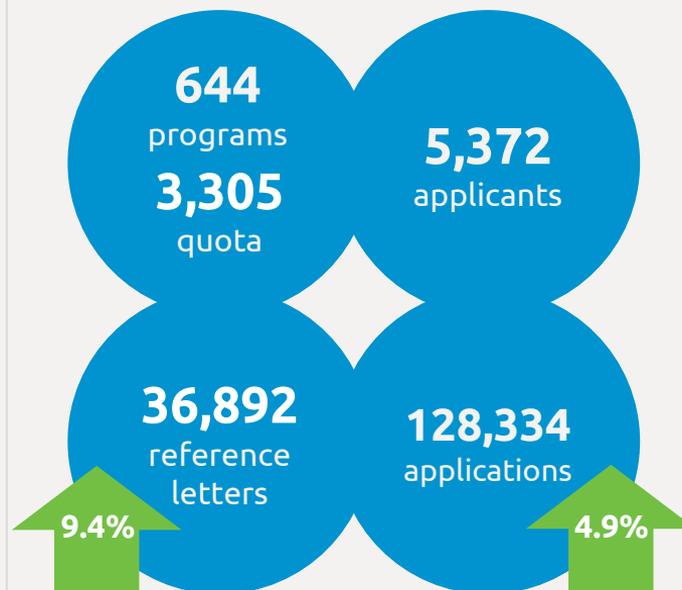
## Client services

2017 R-1 Main Residency Match  
First and second iterations combined



## Applications

2017 R-1 Main Residency Match  
First and second iterations combined



# Applicant pool breakdown 2017

## First and second iterations combined

	REGISTRANTS	WITHDRAWN APPLICANTS	ACTIVE APPLICANTS	FINAL PARTICIPANTS*
CMG	3,005	25	2,969	<b>2,955</b>
IMG	2,495	58	2,348	<b>1,811</b>
USMG	69	8	55	<b>46</b>

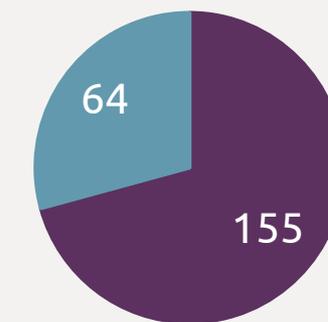
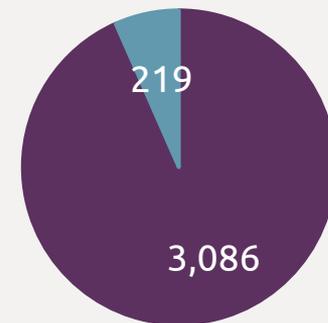
\*Final participants: submitted a rank order list.

Does not double count if an applicant participates in first and second iterations.

# 2017 R-1 match national highlights

First iteration				
Graduate type	Current Year		Prior Year	
	# Matched	# Unmatched	# Matched	# Unmatched
CMG	2,644 (94.1%)	166	60 (72.3%)	23
USMG	22 (55.0%)	18	2 (50.0%)	2
IMG	108 (44.8%)	133	250 (18.2%)	1,126

Second iteration				
Graduate type	Current Year		Prior Year	
	# Matched	# Unmatched	# Matched	# Unmatched
CMG	70 (50.7%)	68	32 (41.0%)	46
USMG	0	0	0	3
IMG	12 (17.4%)	57	41 (4.5%)	879



■ Filled ■ Unfilled

# 2017 R-1 match regional highlights (applicant view)

## First iteration

Region	Current Year		Prior Year	
	# Matched	# Unmatched	# Matched	# Unmatched
Western	783 (94.8%)	43	11	3
Ontario	868 (93.0%)	65	20	9
Quebec	816 (94.2%)	50	26	11
Eastern	177 (95.7%)	8	9	0

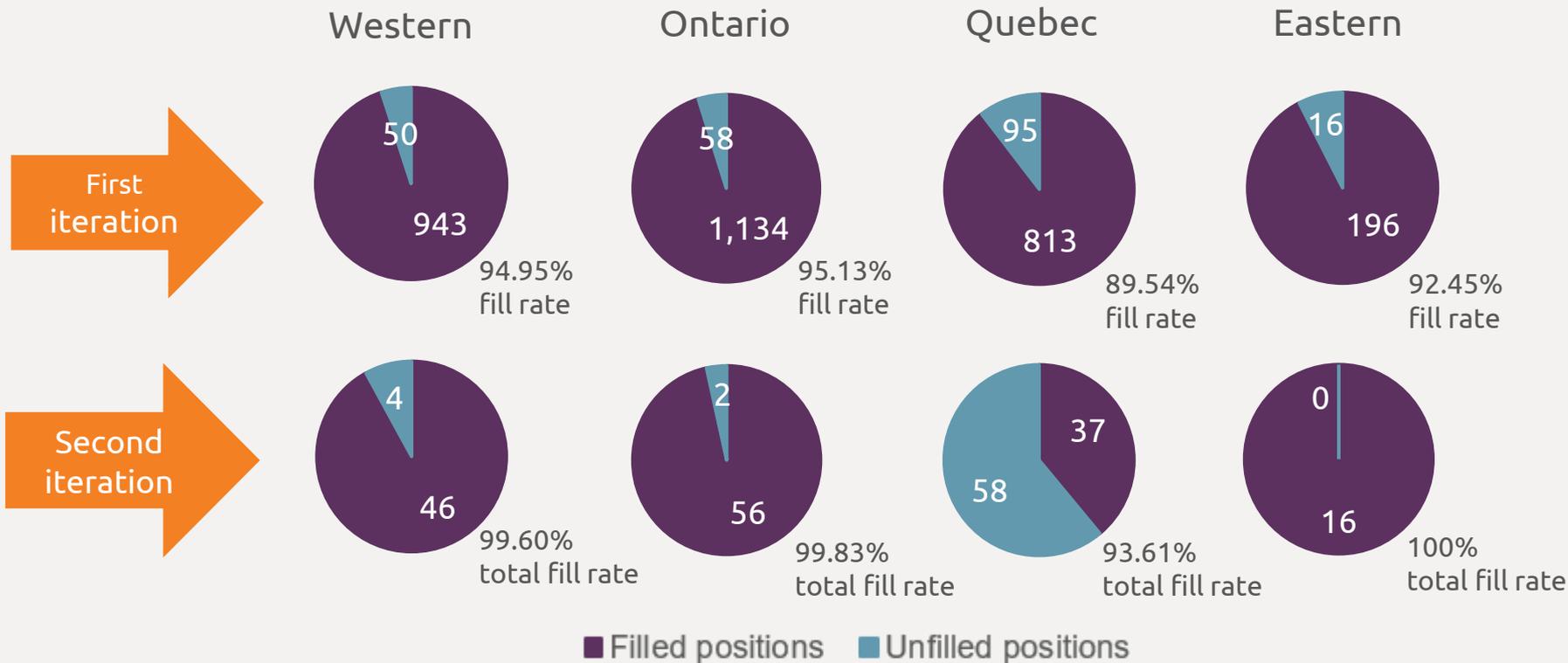
## Second iteration

Region	Current Year		Prior Year	
	# Matched	# Unmatched	# Matched	# Unmatched
Western	17 (45.9%)	20	7	15
Ontario	22 (38.6%)	35	12	18
Quebec	29 (78.4%)	8	8	7
Eastern	2 (28.6%)	5	5	6

% Unmatched  
current year CMGs  
after second  
iteration

National: 2.4%  
Western: 2.4%  
Ontario: 3.8%  
Quebec: 0.9%  
Eastern: 2.7%

## 2017 R-1 match highlights by region (program quota view)

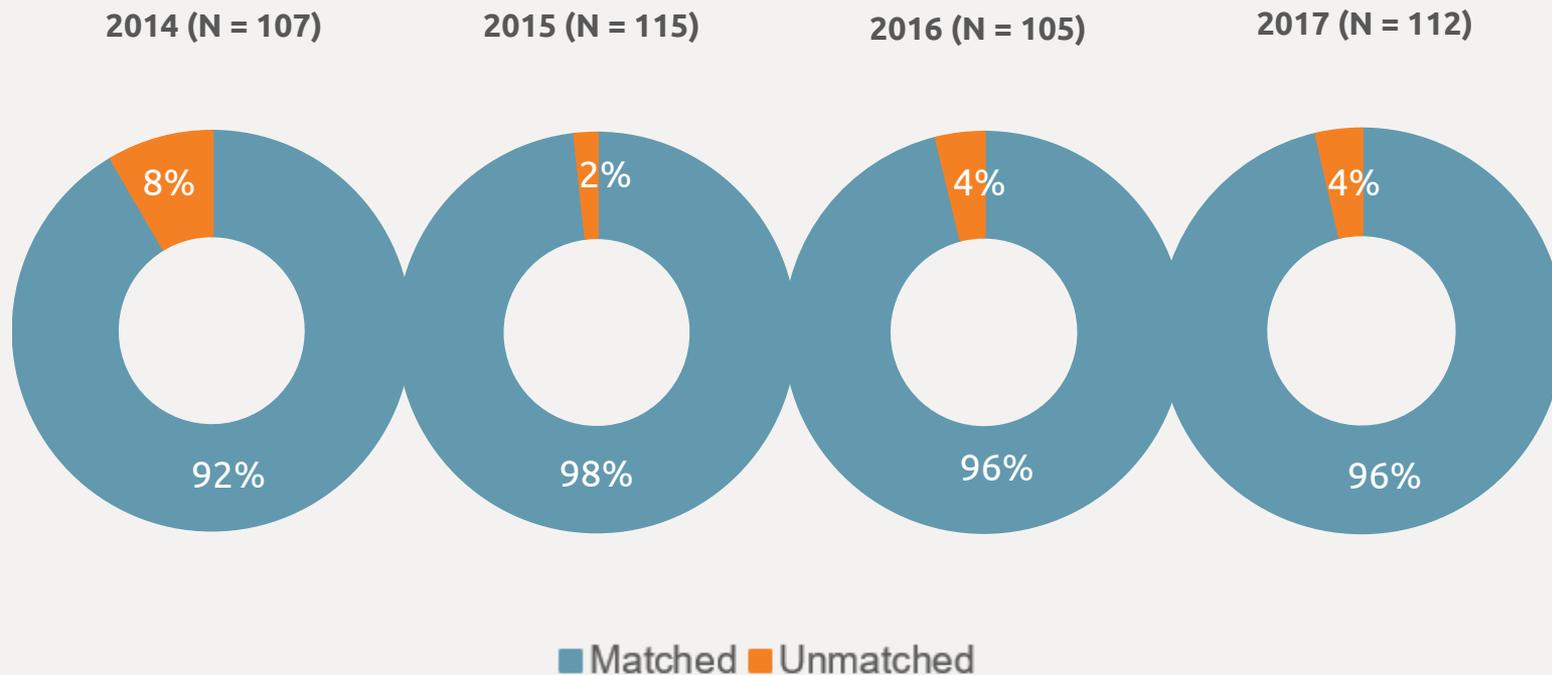


# Summary of 2017 match results

## First and second iterations combined

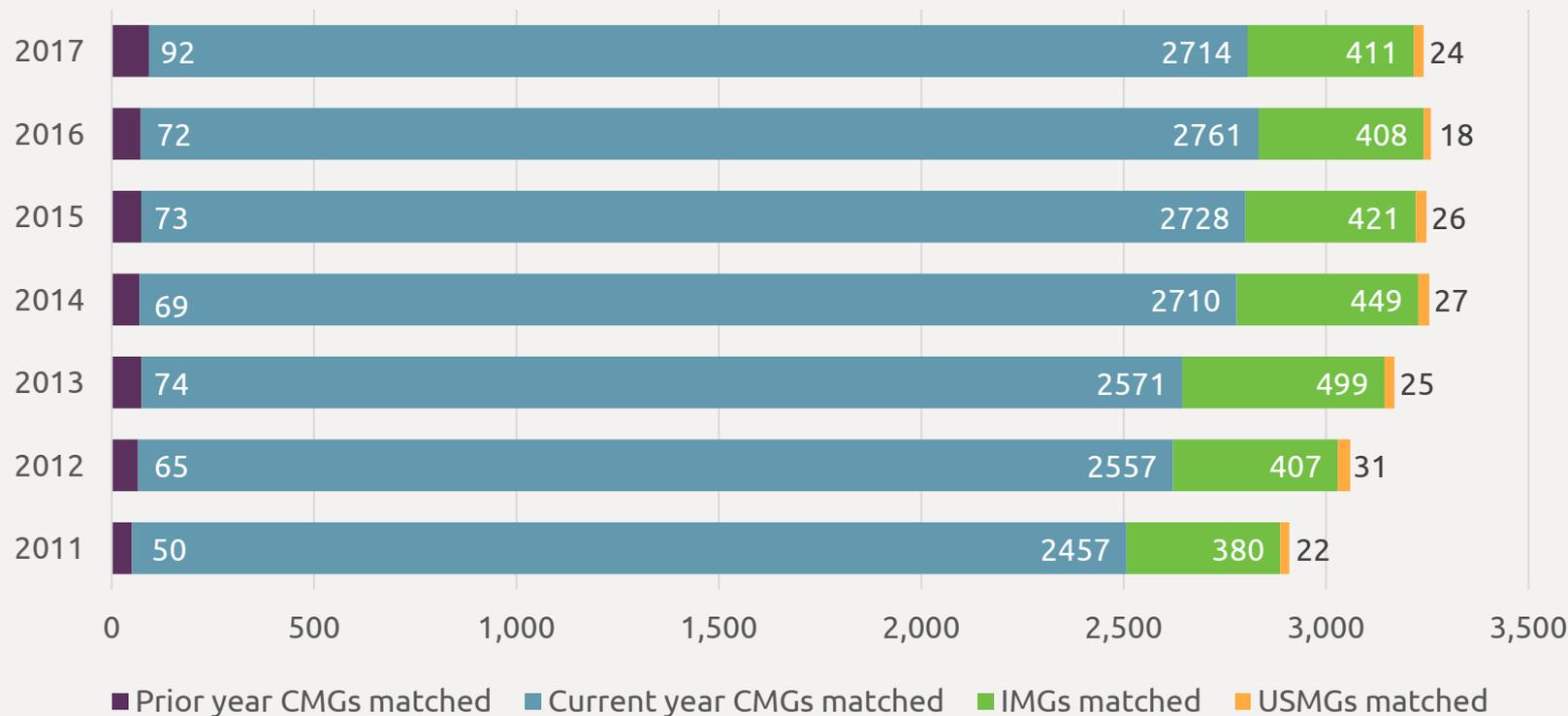
Applicant type	# matched	% matched
Current year CMG	2,714	<b>96.5</b>
Previous year CMG	92	<b>64.8</b>
IMG	411	<b>22.7</b>
USMG	24	<b>52.2</b>

# Couples match rates (2014-2017)



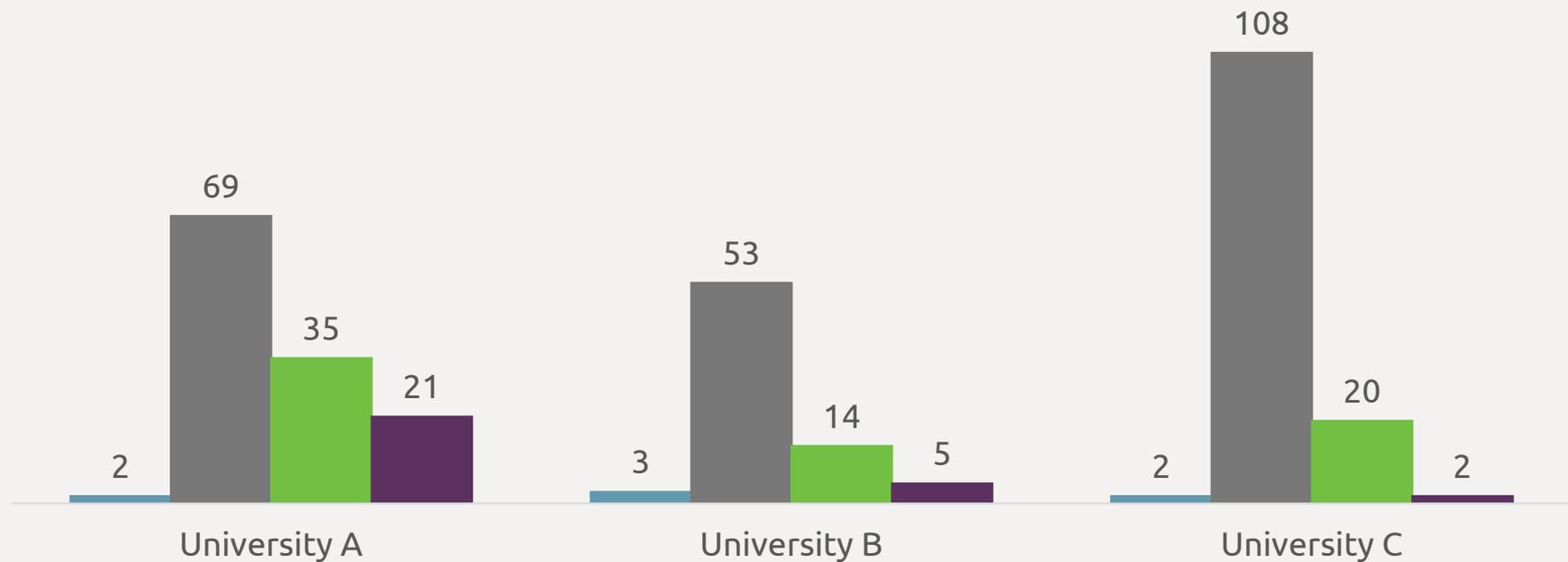
\*includes couples that matched only one partner

# Who entered postgraduate training in Canada (2011-2017)



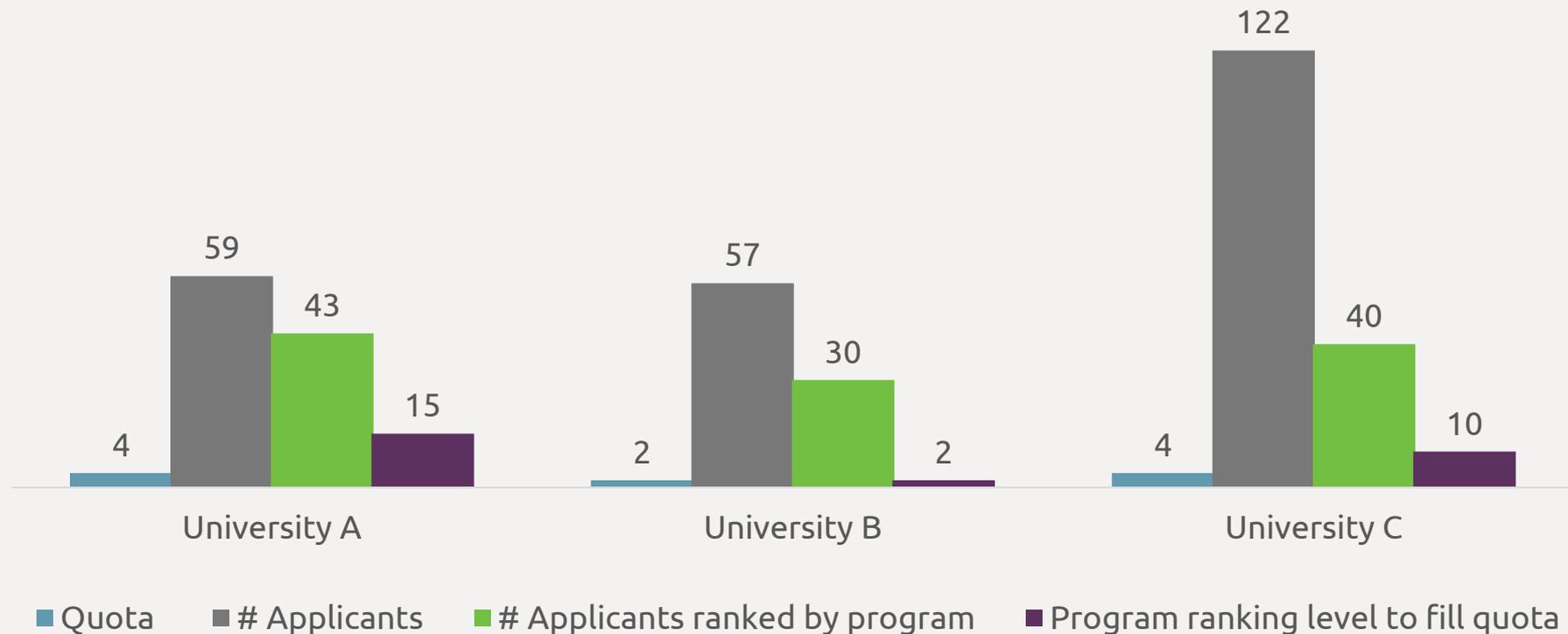
# Program application: the program perspective

# Program application and selection information: Discipline 1



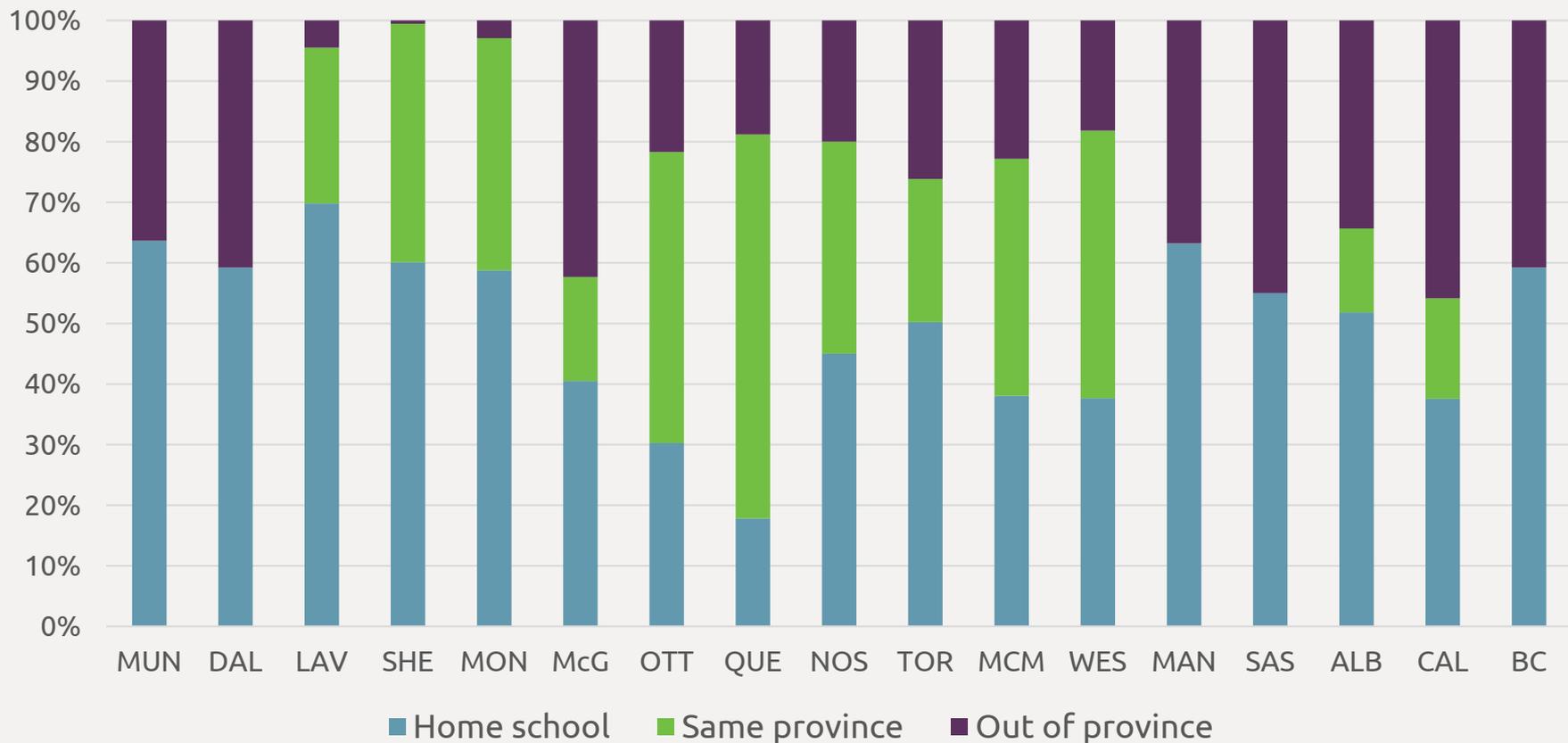
■ Quota   ■ # Applicants   ■ # Applicants ranked by program   ■ Program ranking level to fill quota

# Program application and selection information: Discipline 2

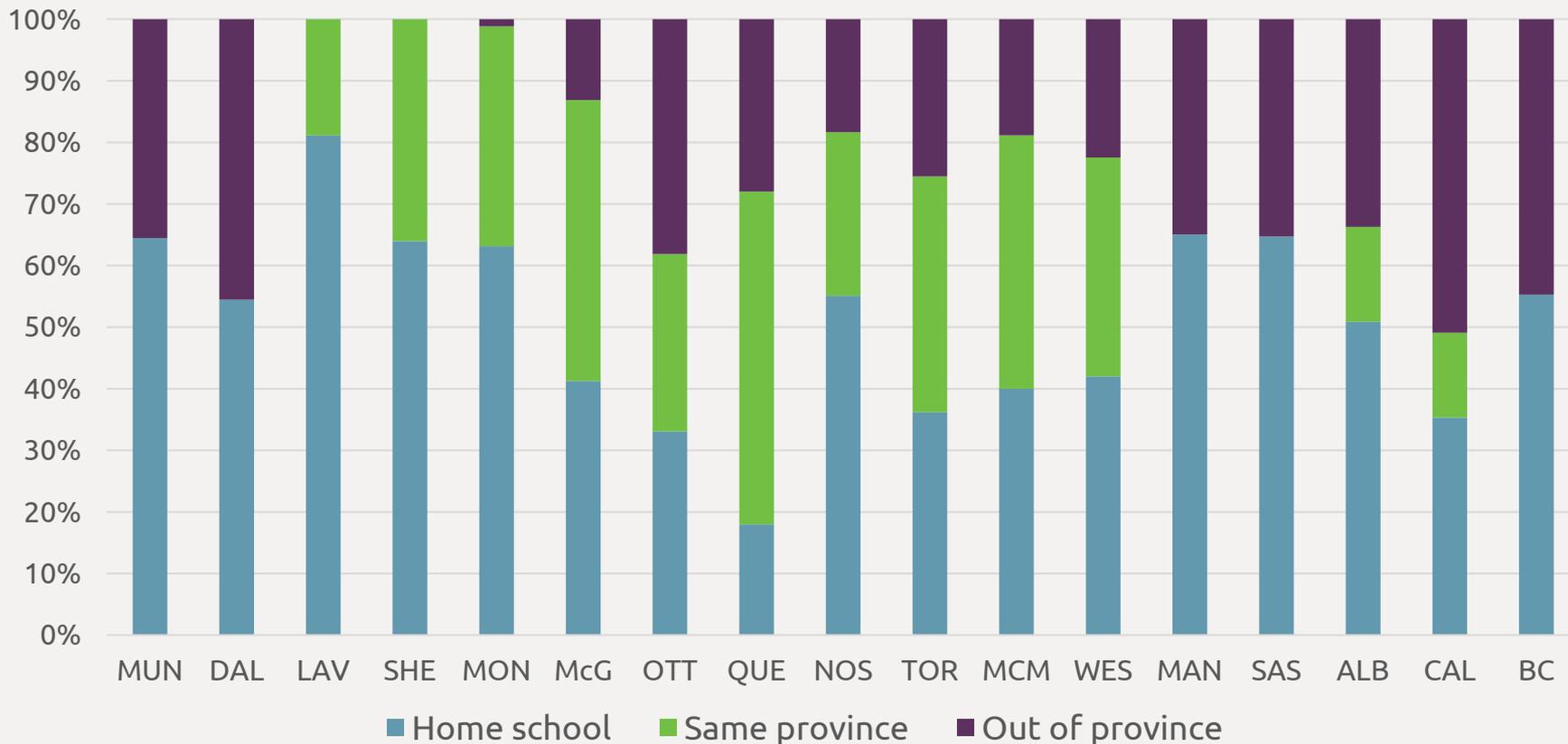


CMG choices

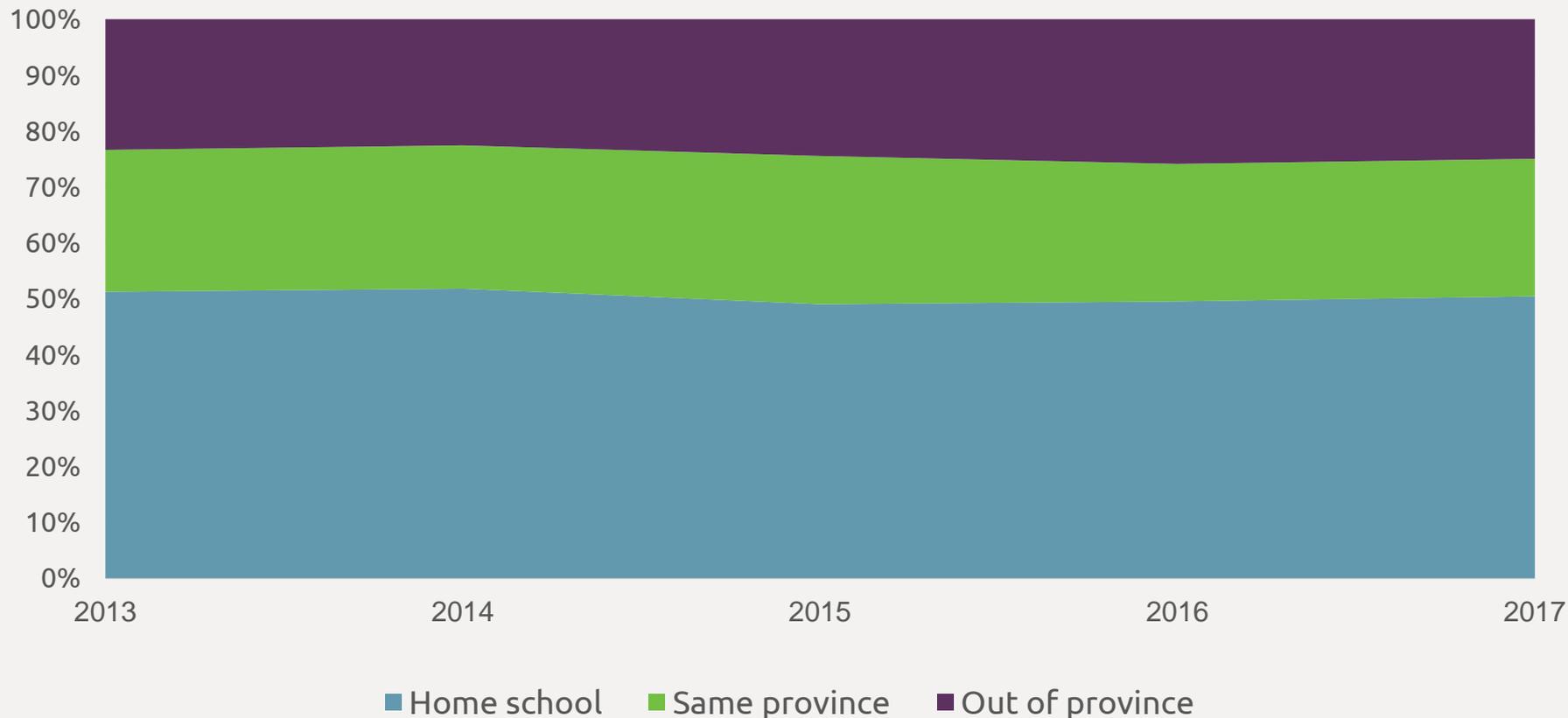
## Graduate mobility: emigration by school of medicine in 2017



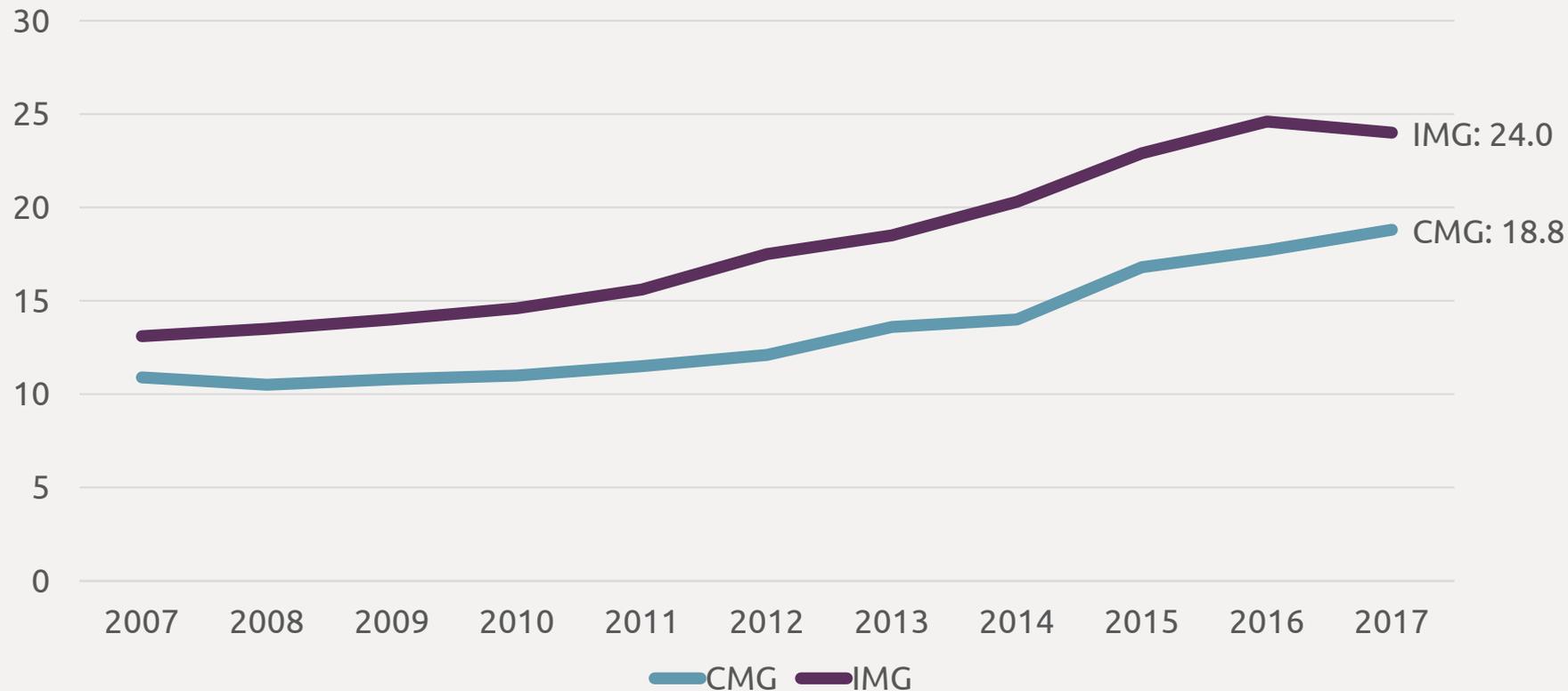
# Graduate mobility: immigration by school of residency in 2017



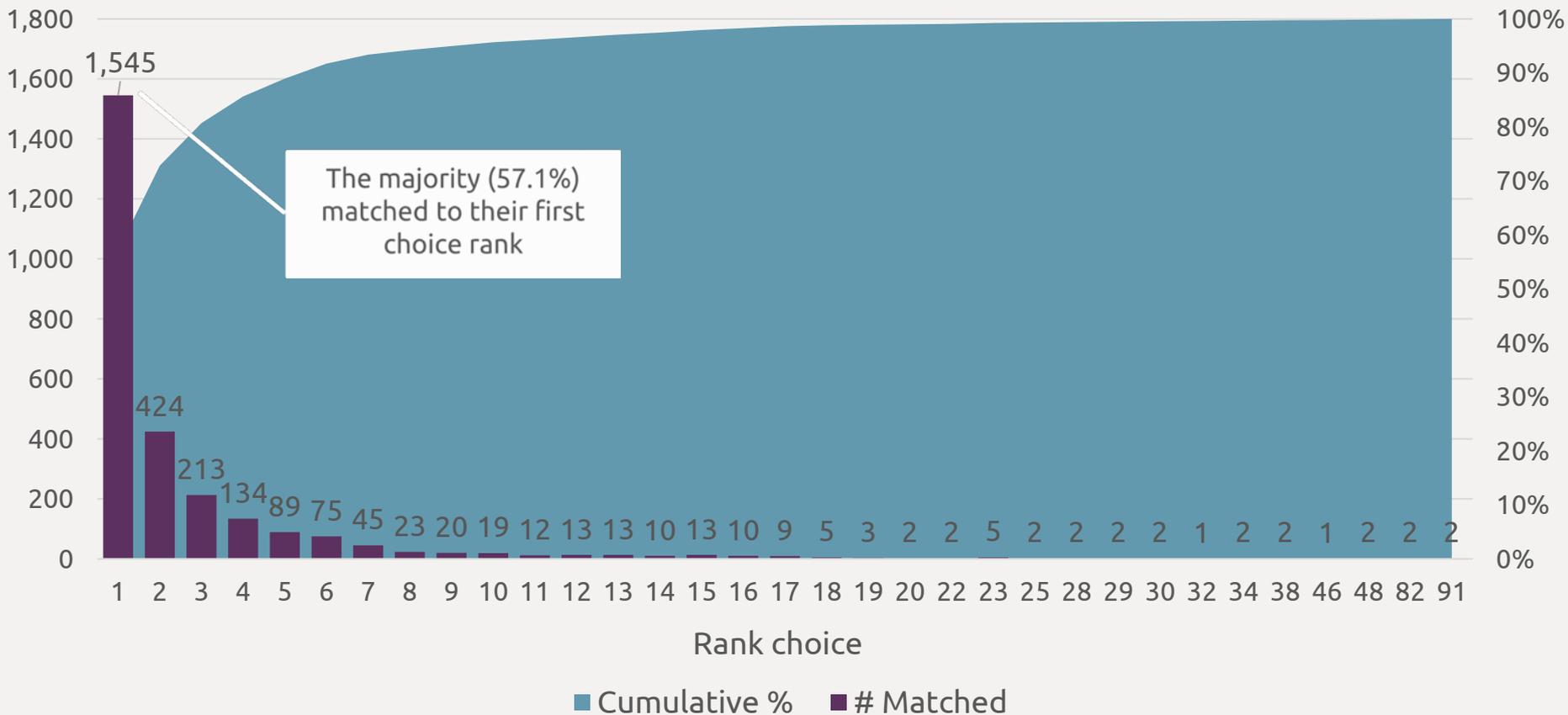
## Graduate mobility: emigration at national level (2013-2017)



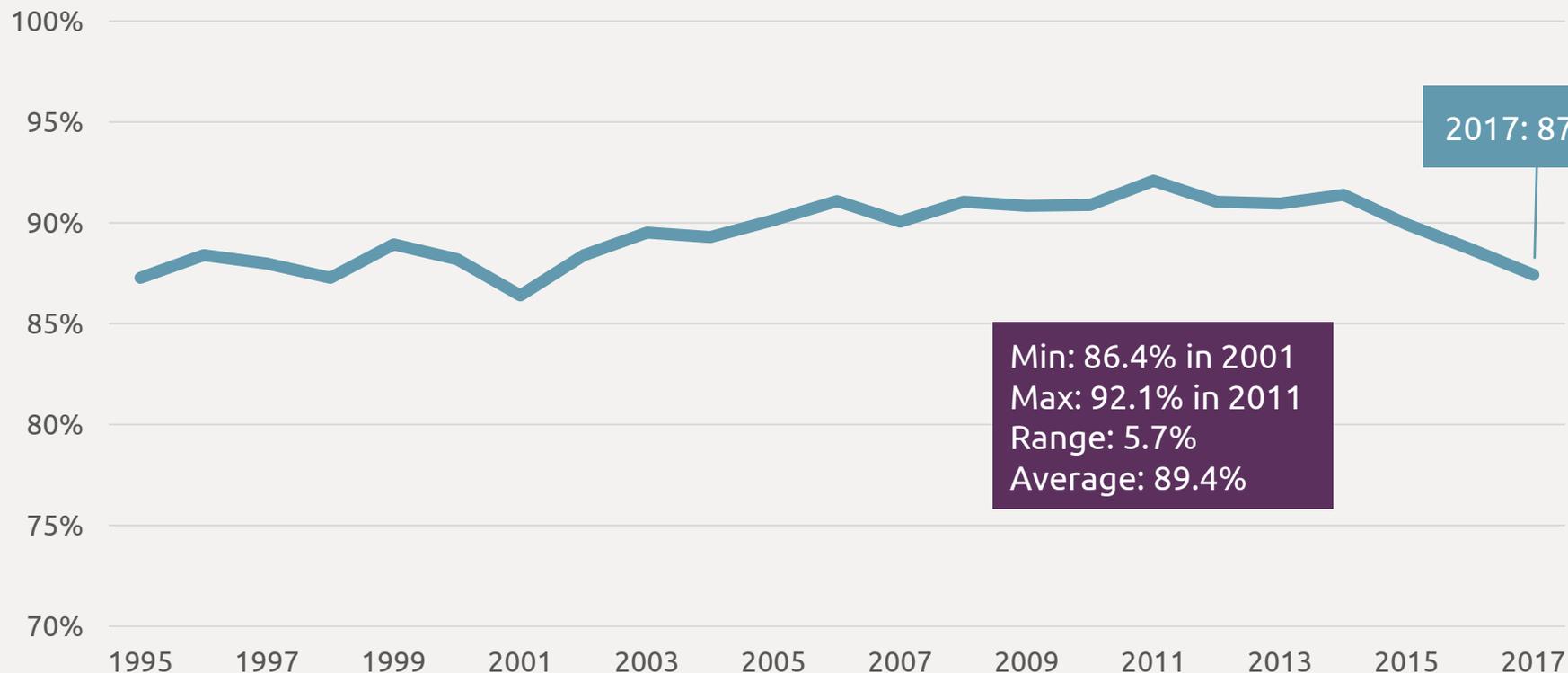
## Average number of program applications by CMG and IMG applicants in the first iteration (2007-2017)



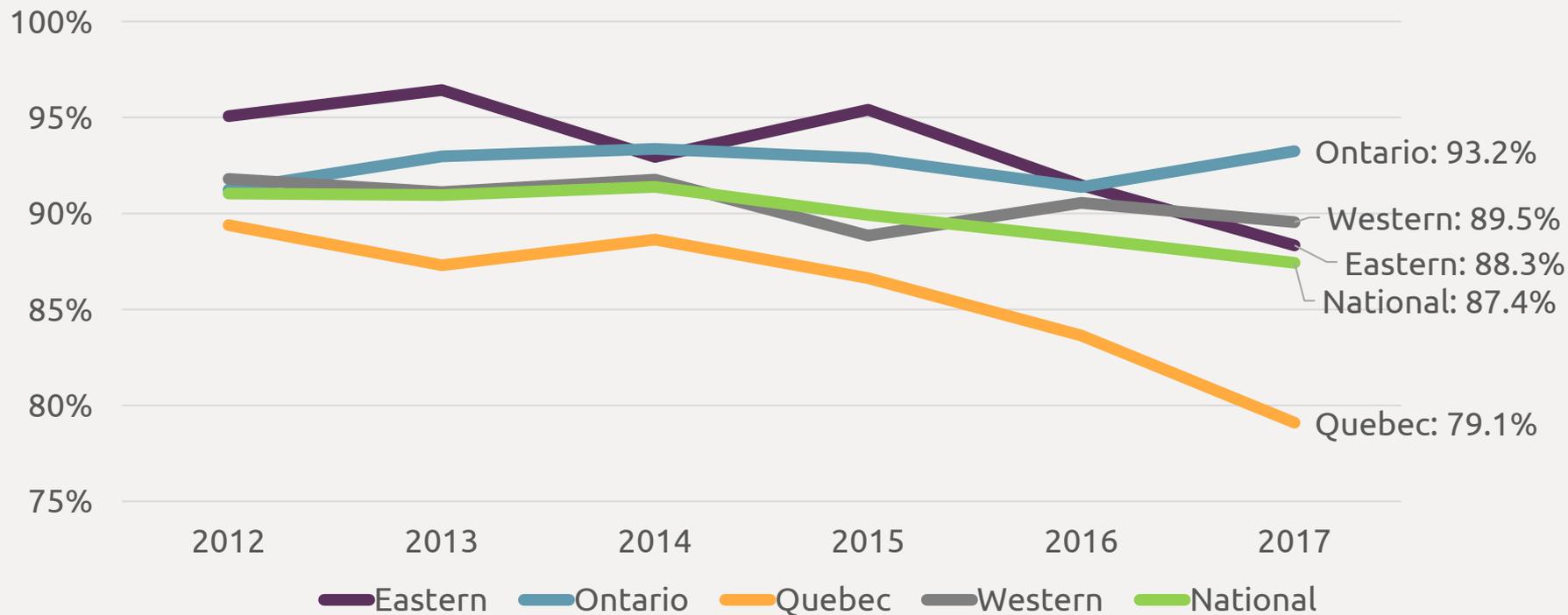
# CMG match results by first and lower rank choices: ROL frequency distribution



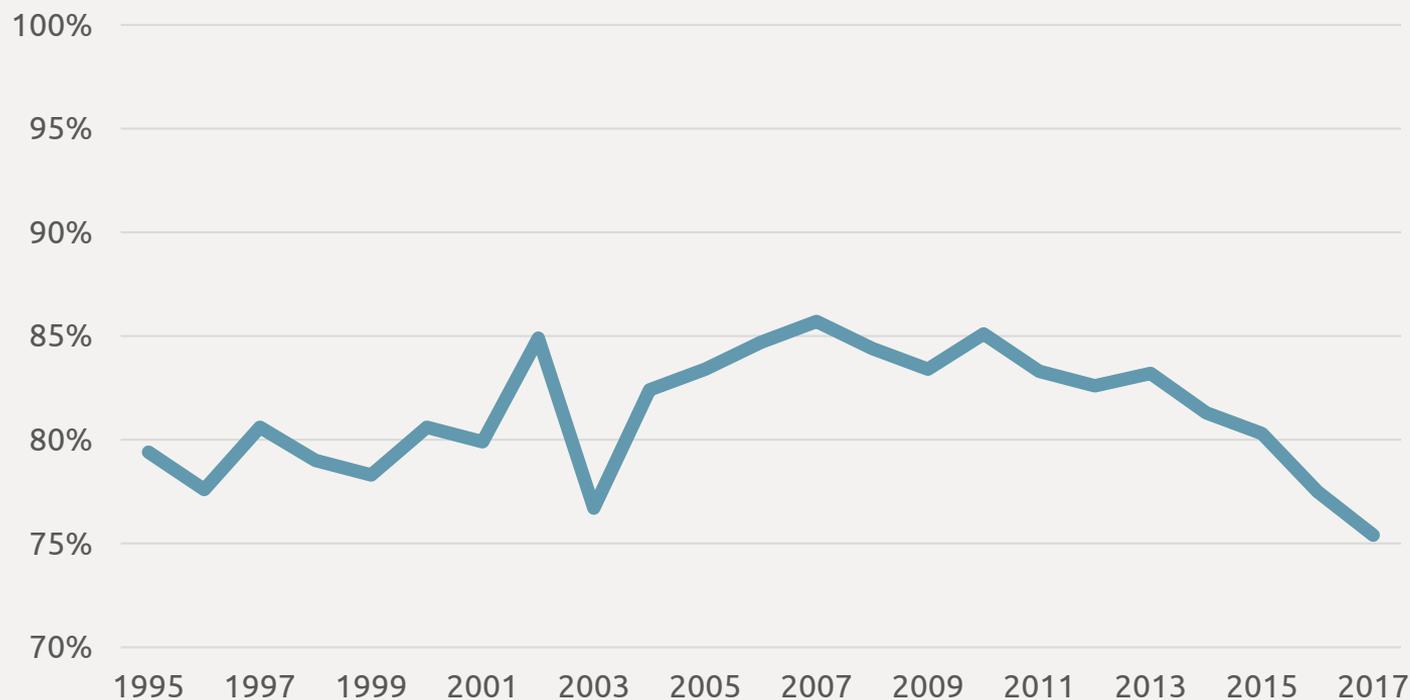
## CMGs matched to first choice discipline (1995-2017)



# CMGs matched to first choice discipline by region (2012-2017)

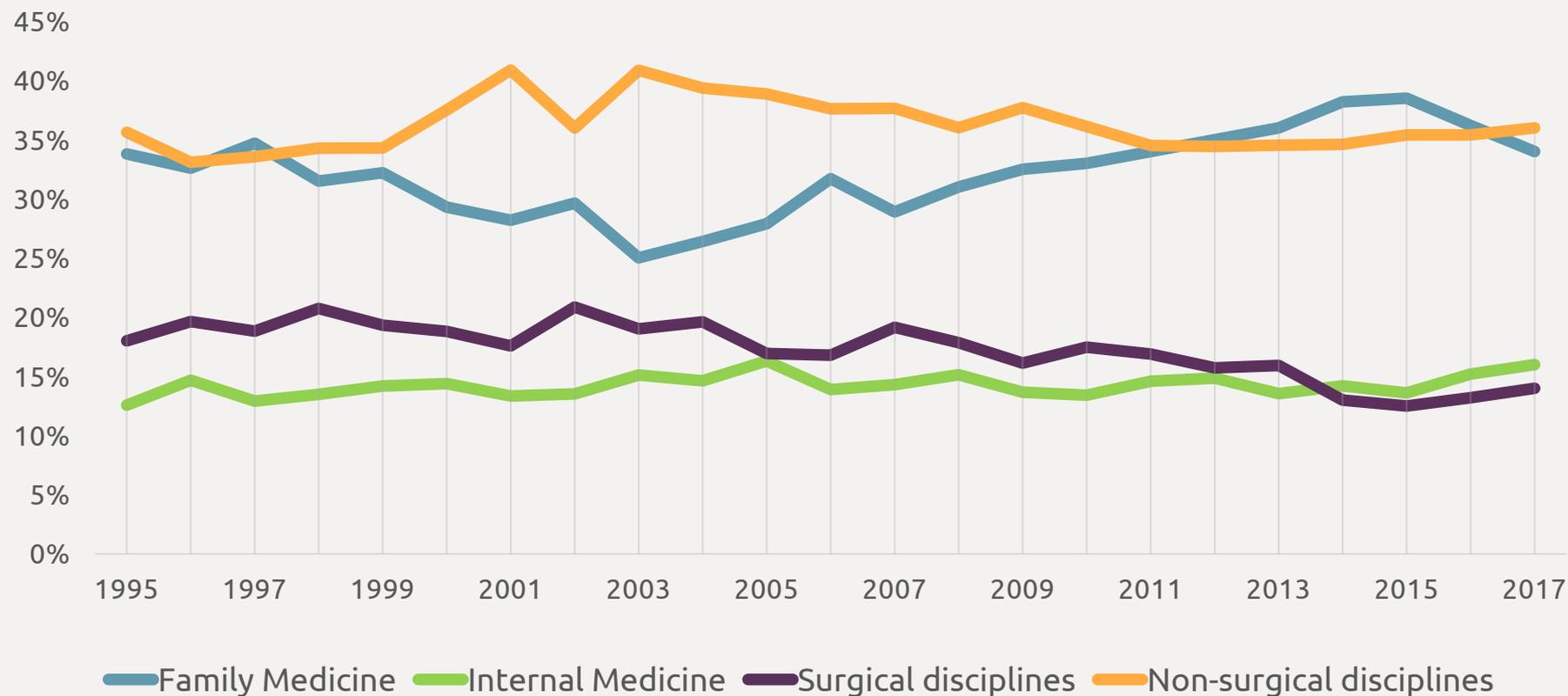


## CMGs matched to one of their top three program choices (1995-2017)



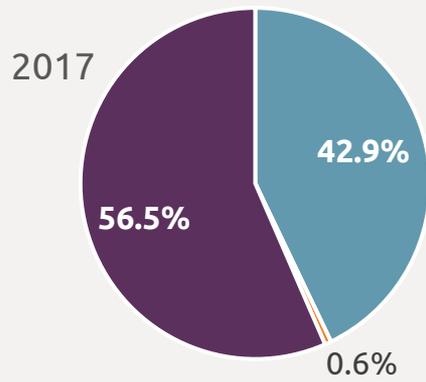
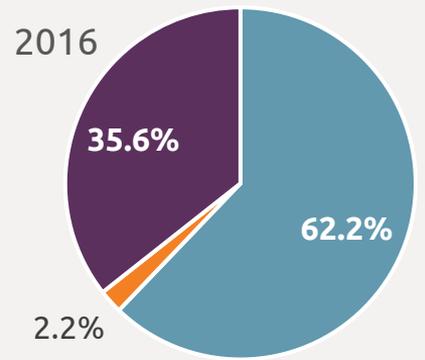
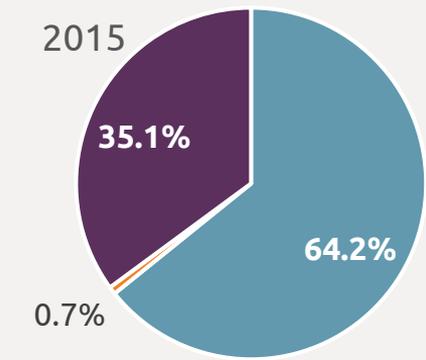
Program choice 2017	
First	53.4%
Second	14.7%
Third	7.4%
Fourth	4.6%
Fifth	3.1%
Sixth	2.6%
Seventh	7.7%

# CMG discipline choices (1995-2017)



# First choice disciplines for CMGs (2015-2017)

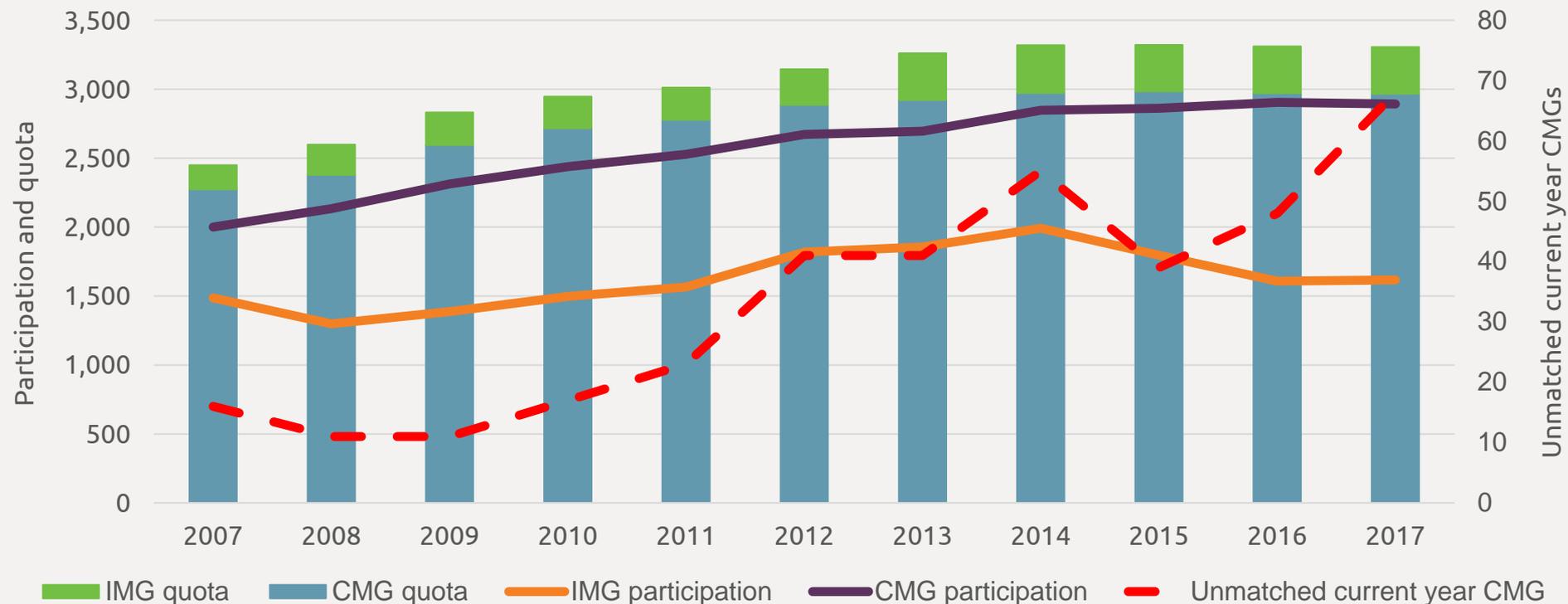
Top 10 first choice disciplines	2015	2016	2017
Family Medicine	38.5%	36.2%	34.0%
Internal Medicine	13.6%	15.2%	16.0%
Surgical disciplines	12.5%	13.2%	13.8%
Psychiatry	6.0%	6.0%	6.2%
Pediatrics	5.5%	5.8%	5.9%
Anesthesiology	4.8%	4.8%	4.8%
Emergency Medicine	4.2%	4.4%	4.1%
Obstetrics & Gynecology	3.9%	3.8%	3.9%
Diagnostic Radiology	3.4%	2.6%	3.1%
Dermatology	1.8%	2.2%	2.1%



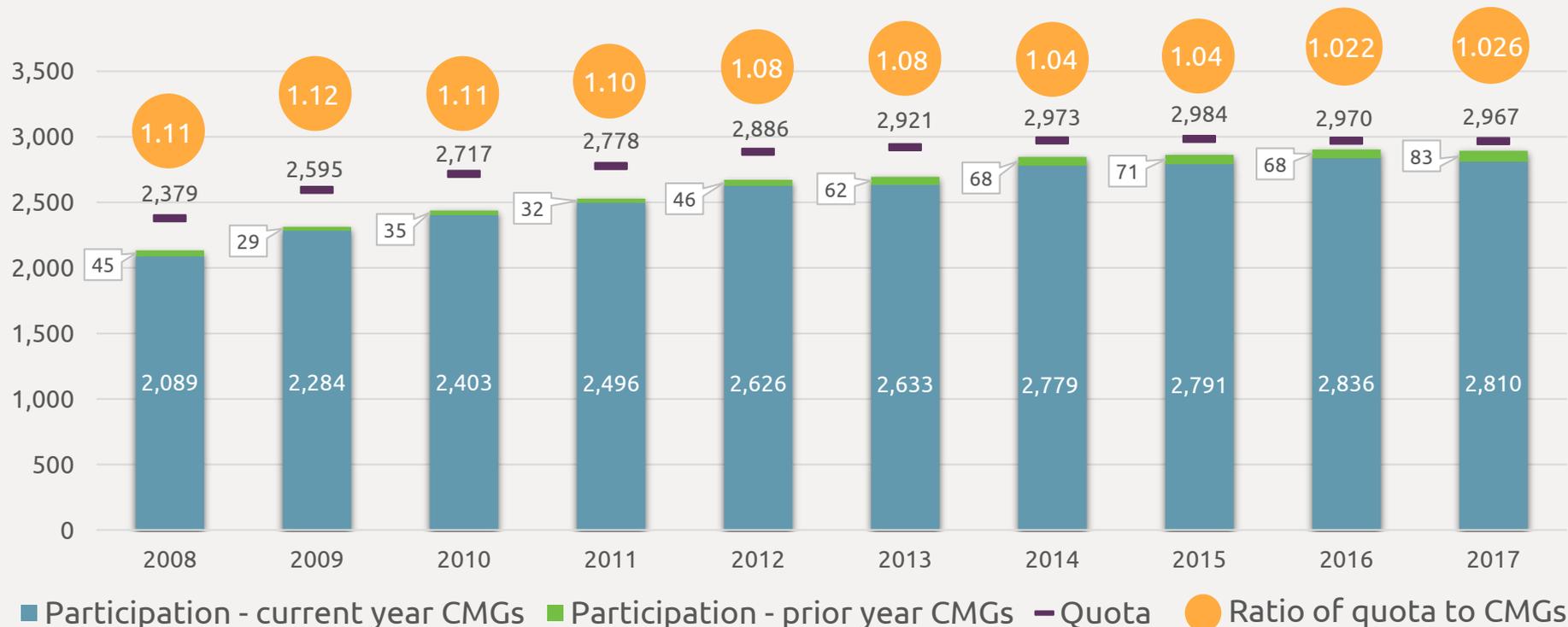
- Supply > demand
- Supply = demand
- Demand > supply

# Supply and demand

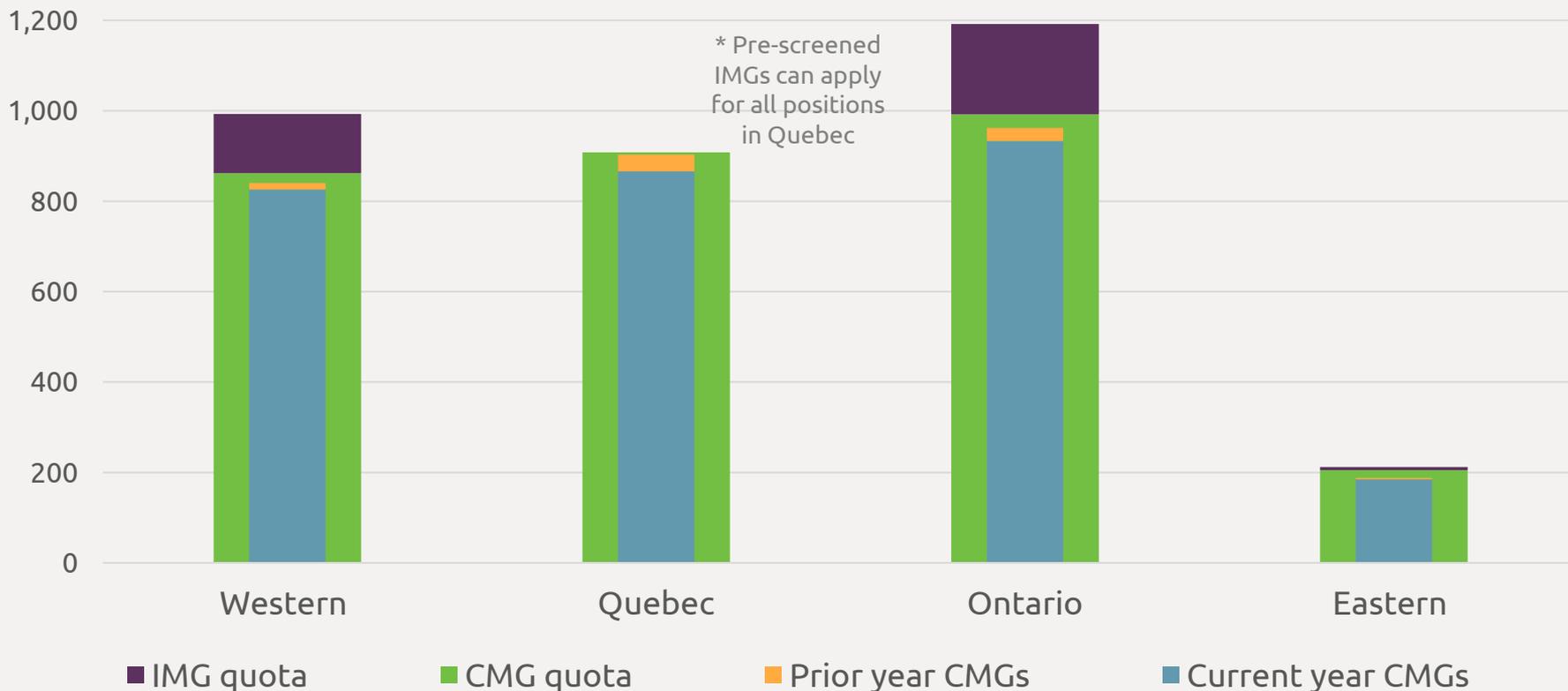
# First iteration participation and quota, second iteration unmatched (2007-2017)



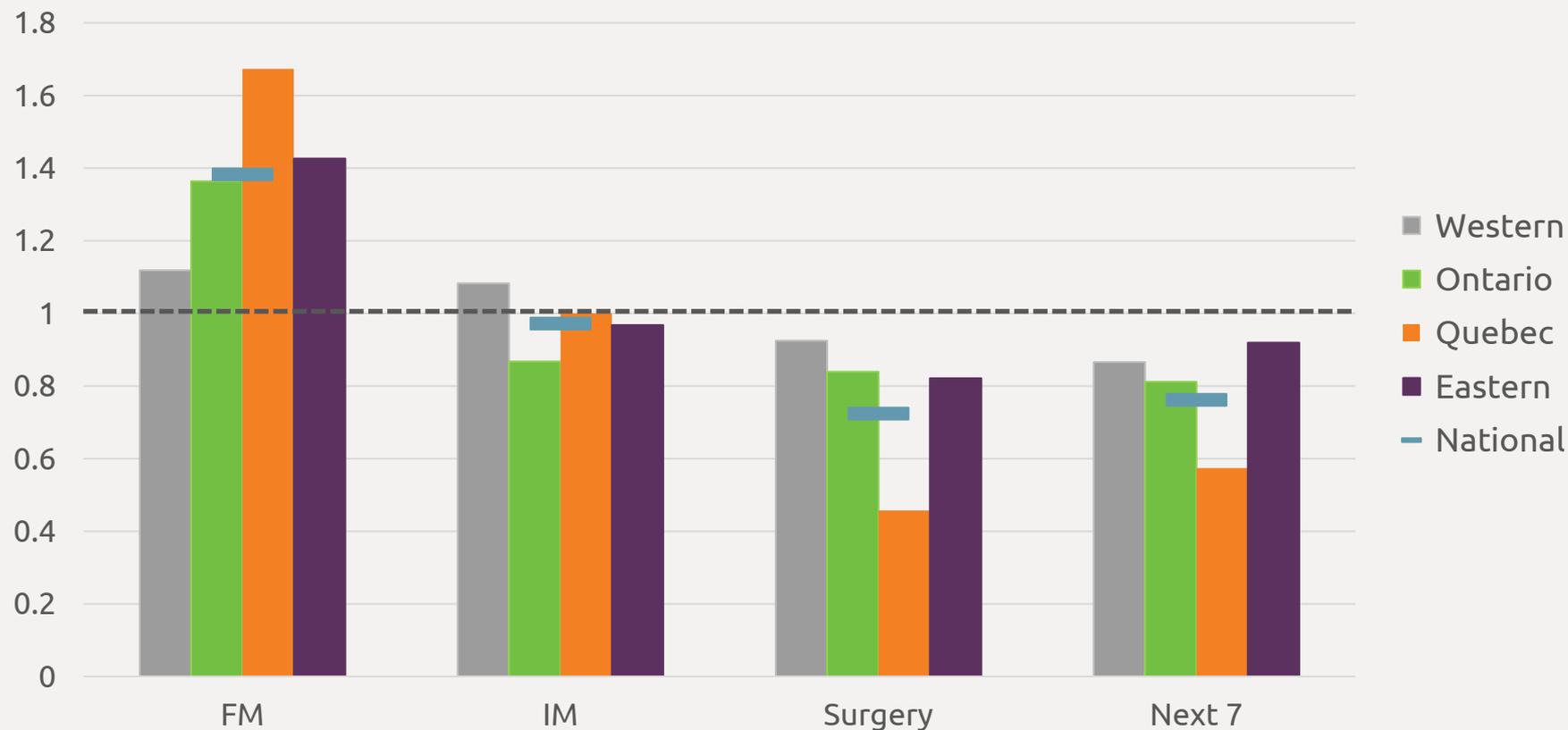
# CMG quota, participation and ratio (2008-2017)



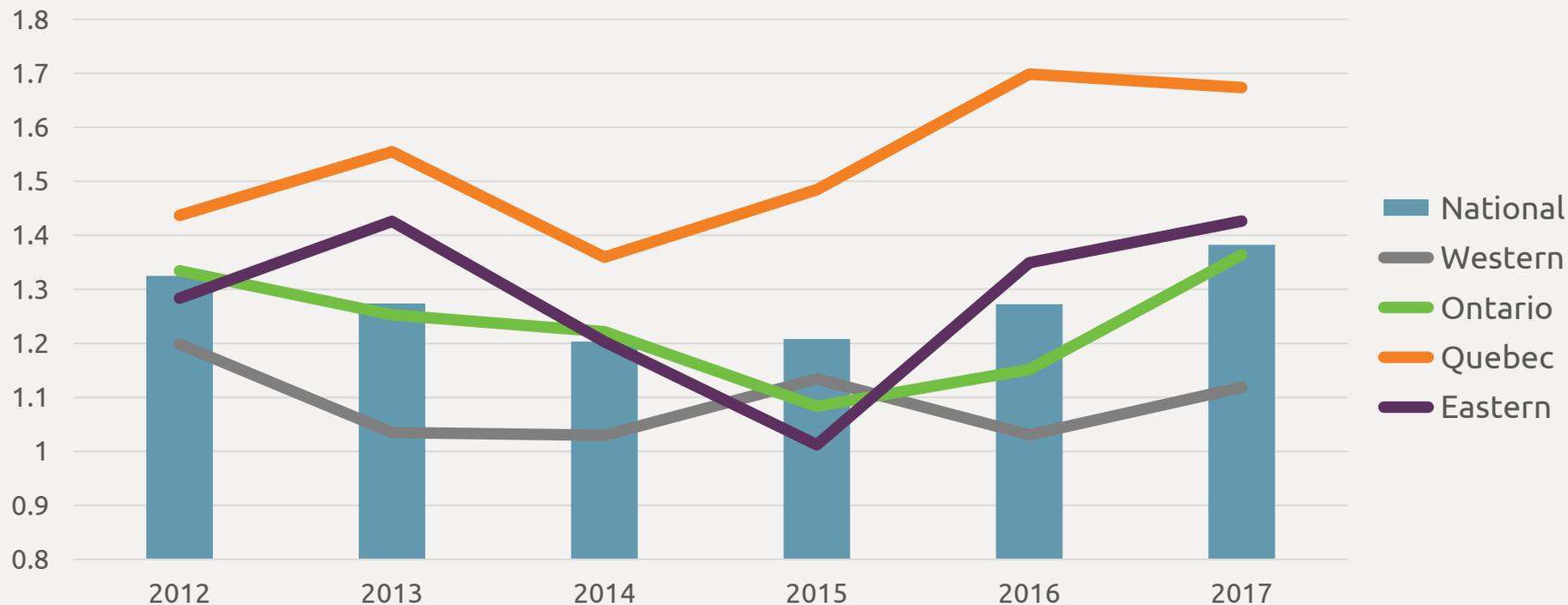
# Quota and CMG count by region in 2017



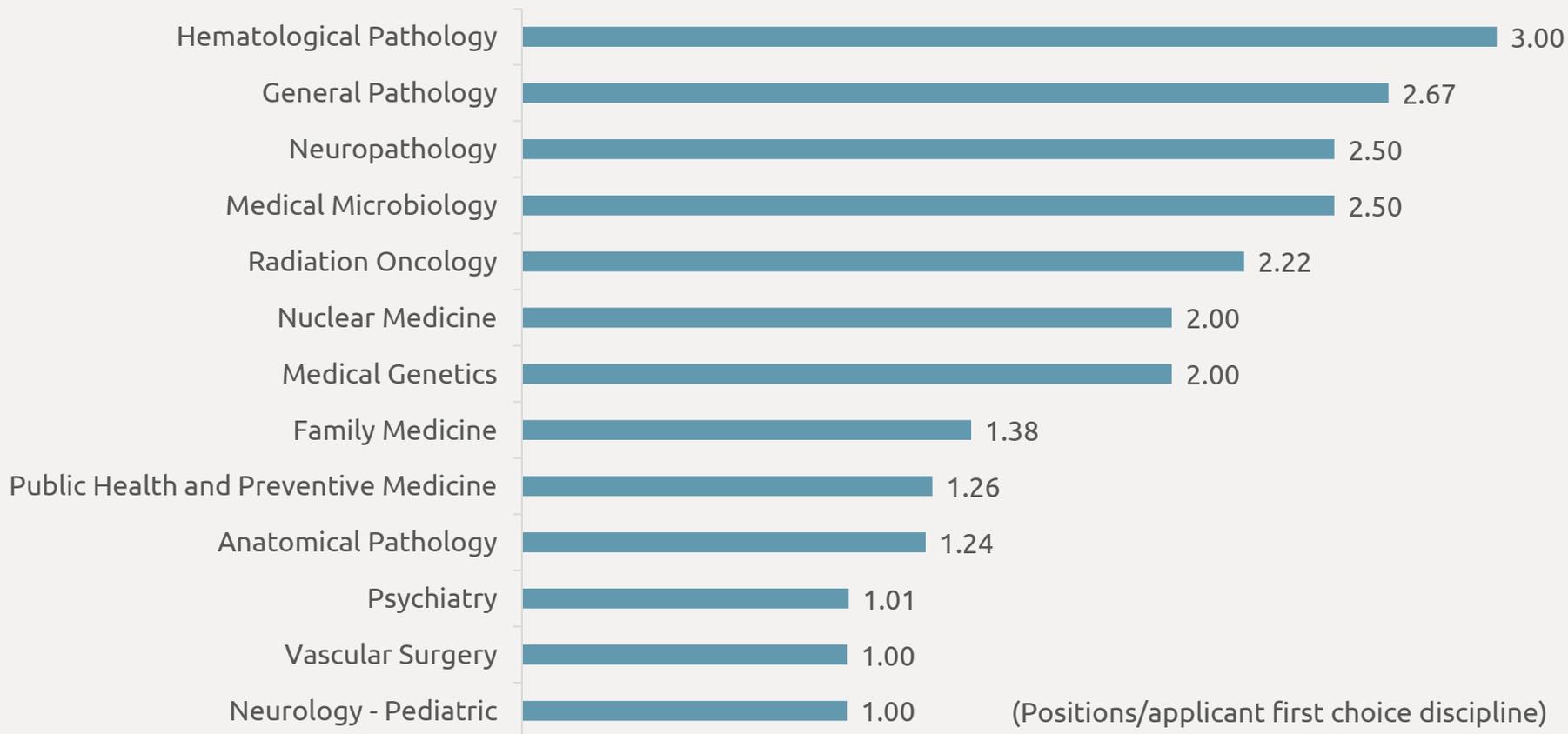
# Supply and demand ratio: CMG quota filled in 2017



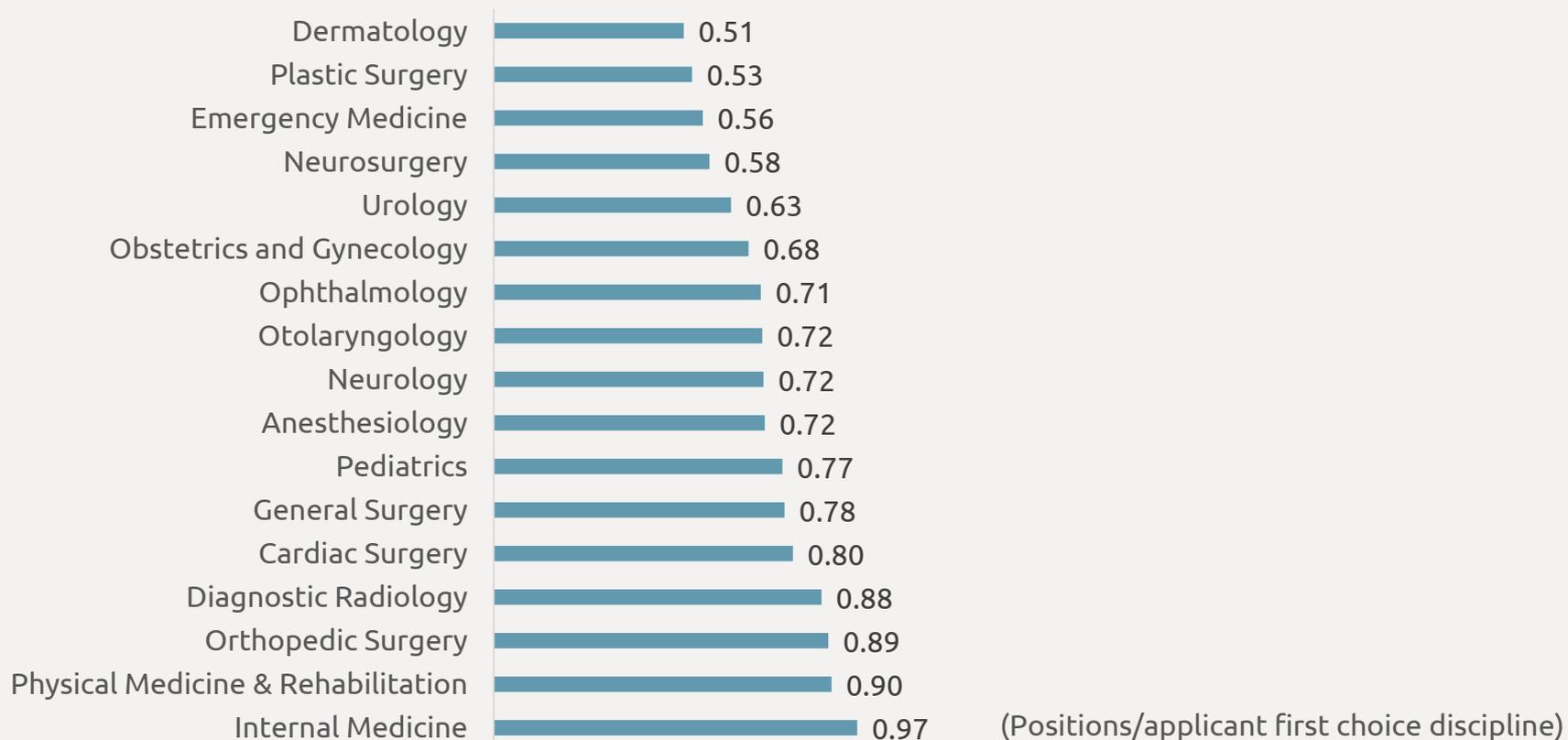
## Supply and demand ratio: CMG quota filled for Family Medicine (2012-2017)



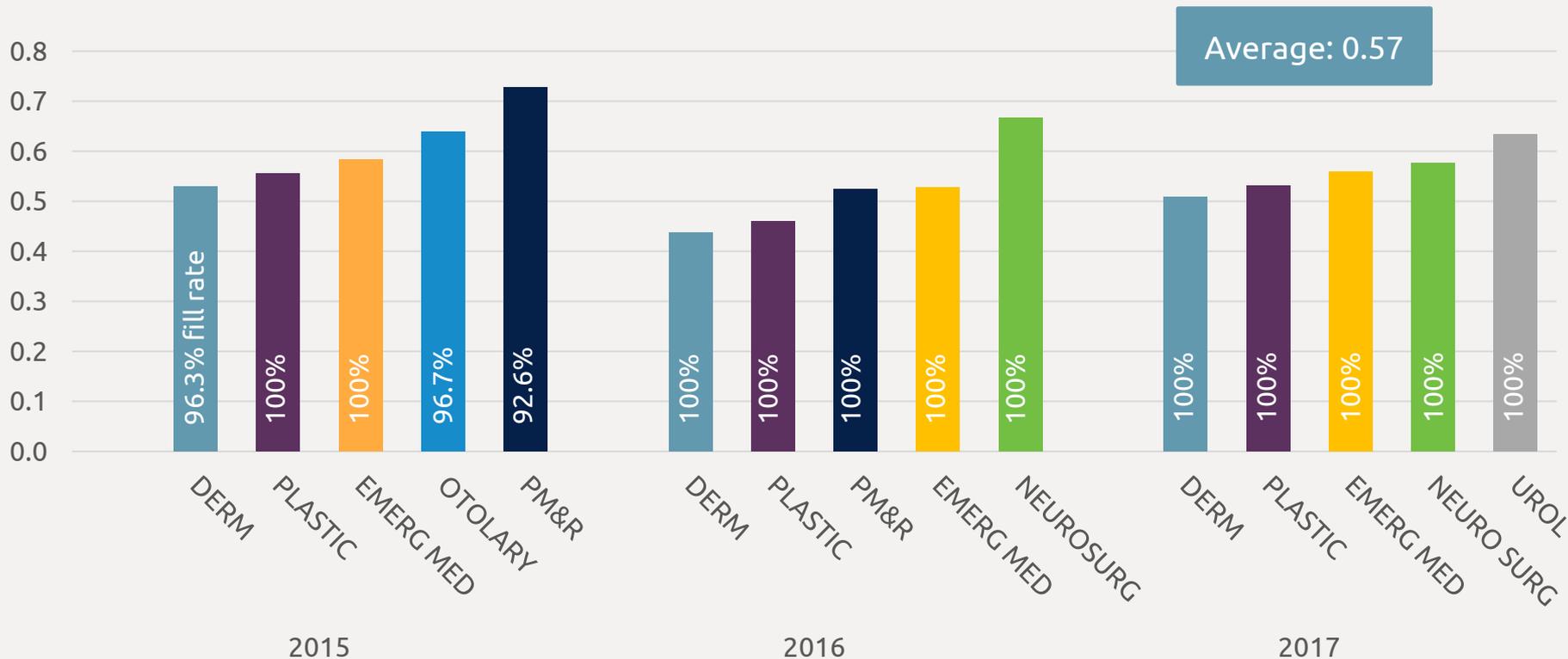
## First choice discipline compared to availability (supply > demand)



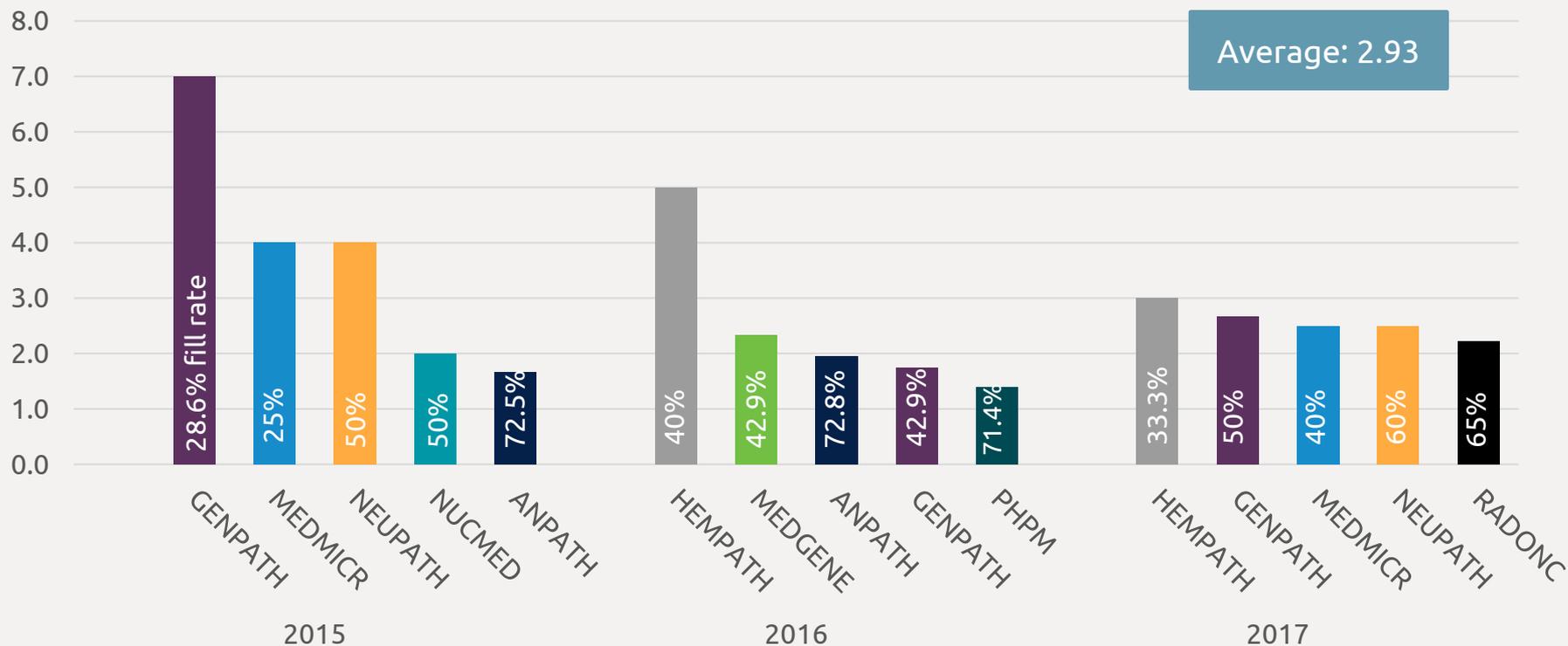
## First choice discipline compared to availability (demand > supply)



## Highest demand ratios: CMGs first discipline choice compared to availability (2015-2017)



## Lowest demand ratios: CMGs first discipline choice compared to availability (2015-2017)



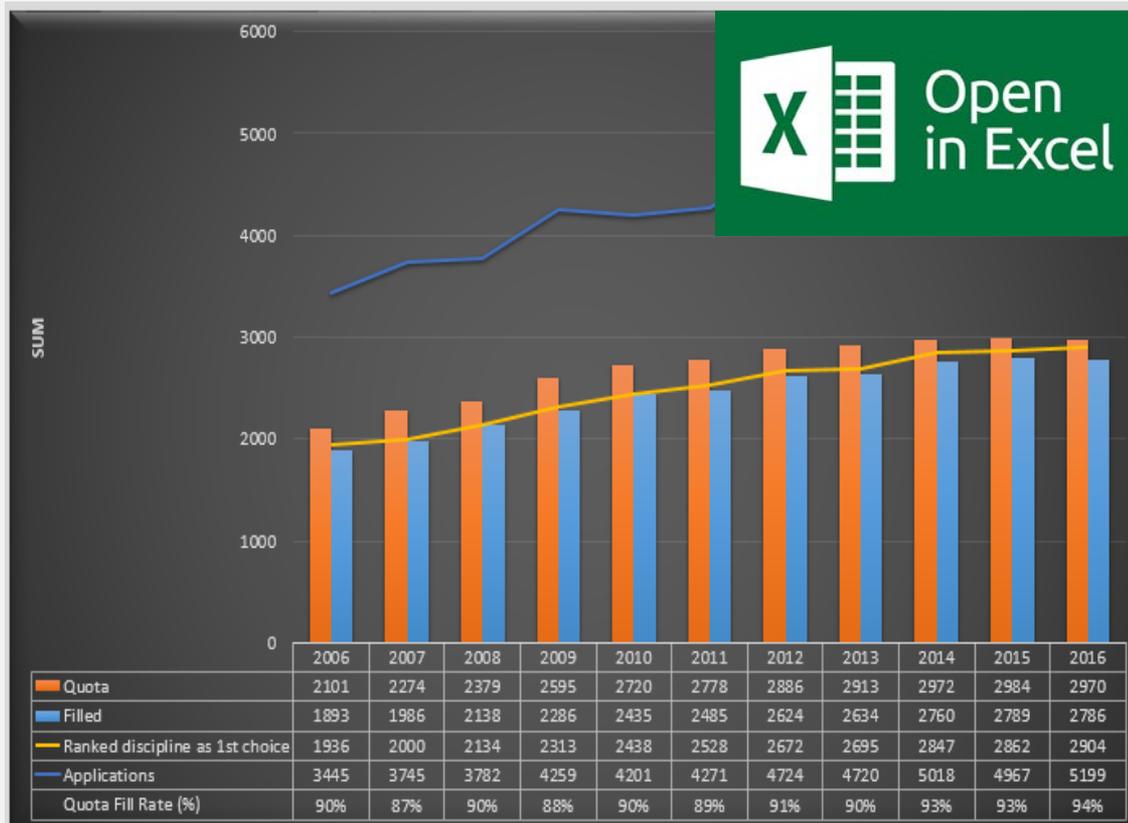
# Interactive data tool demo

Click Here to Group Surgical Disciplines

- Non-surgical Disciplines
- Surgical Disciplines

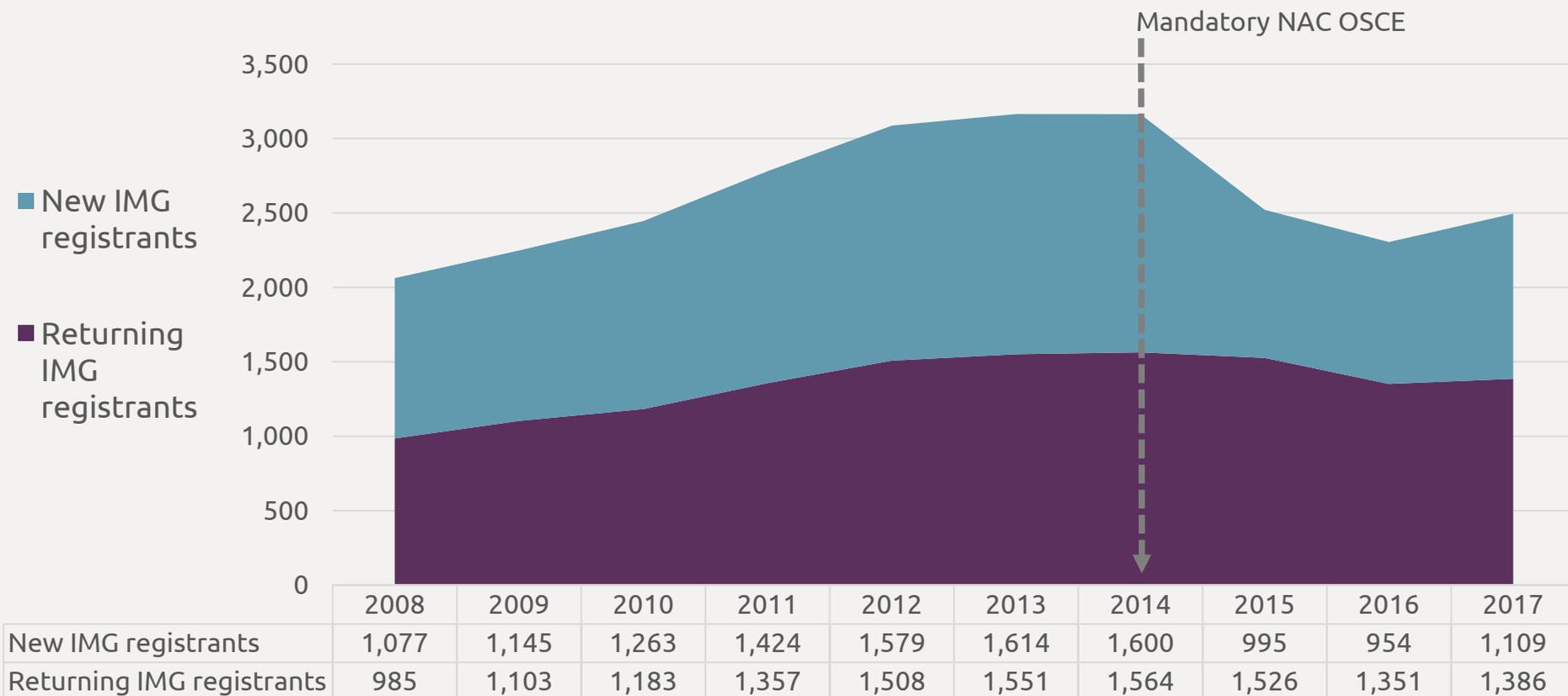
Filter Graph by Discipline

- Neurology
- Neurology - Pediatric
- Neuropathology
- Neurosurgery
- Nuclear Medicine
- OBS/GYN
- Occupational Medicine
- Ophthalmology
- Orthopedic Surgery
- Otolaryngology
- Pediatrics
- Physical Medicine & Rehabilitation
- Plastic Surgery
- Psychiatry
- Public Health & Preventative Medicine
- Radiation Oncology
- Urology
- Vascular Surgery

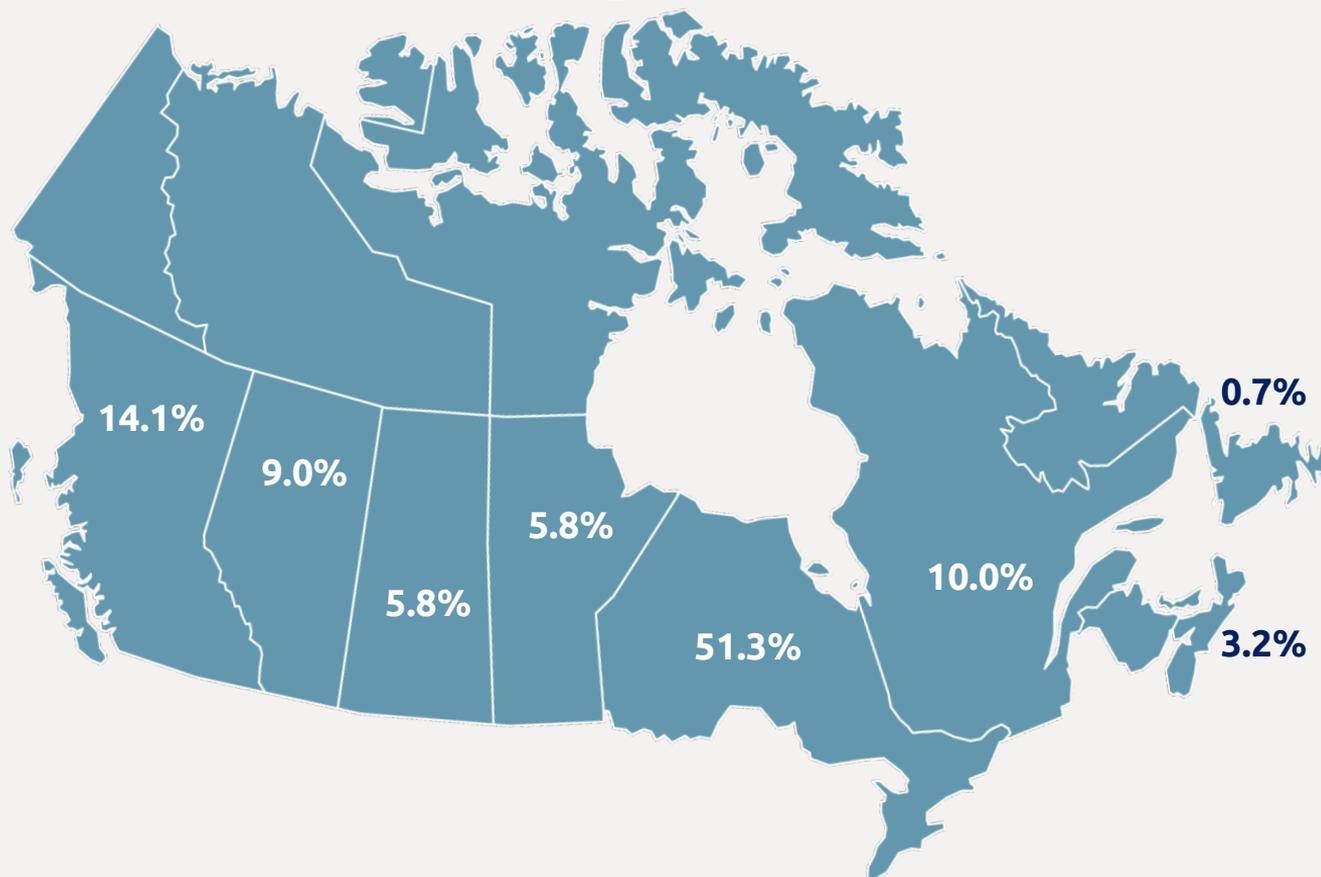


IMG results

# Number of IMG registrants (2008-2017)



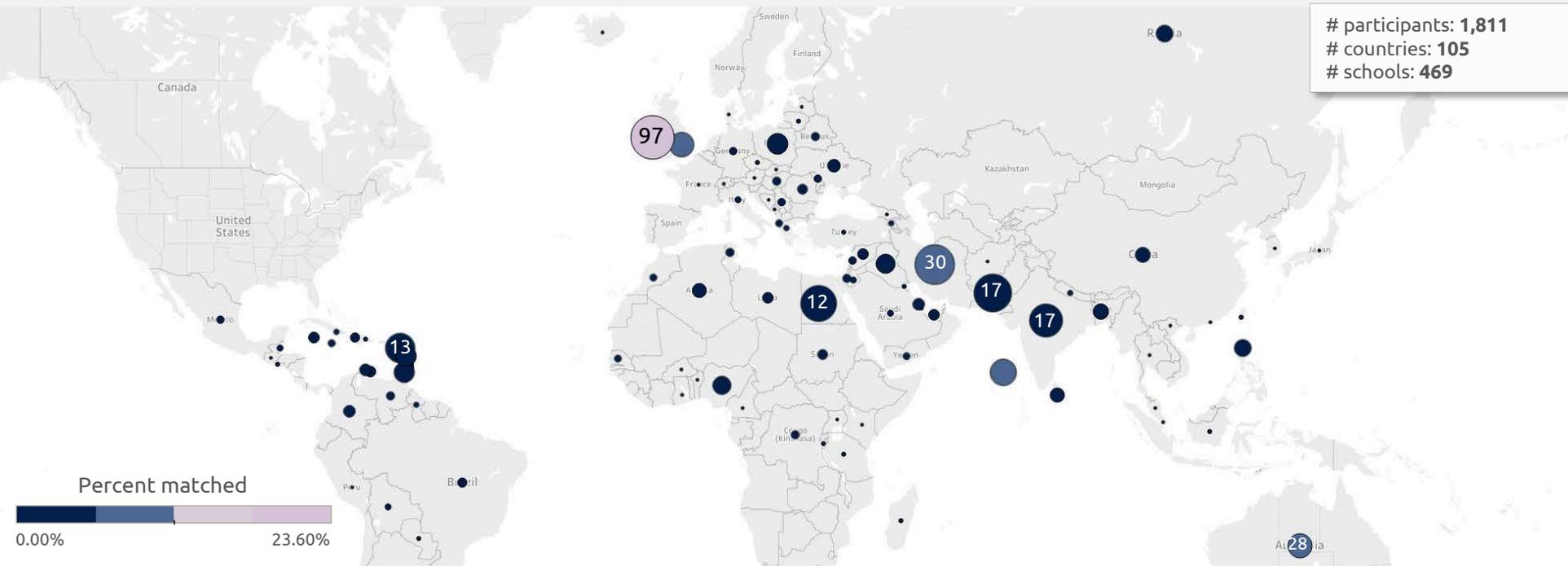
# Where IMGs are training



# Regional IMG match results

Region	Final participation	% matched
Africa	247	13%
Asia	377	15%
Central America/Caribbean	389	20%
Europe	421	37%
Middle East	269	18%
Mexico	6	17%
Oceania/Pacific Islands	61	46%
South America	41	22%

# Where IMG participants went to medical school



# participants: 1,811  
 # countries: 105  
 # schools: 469

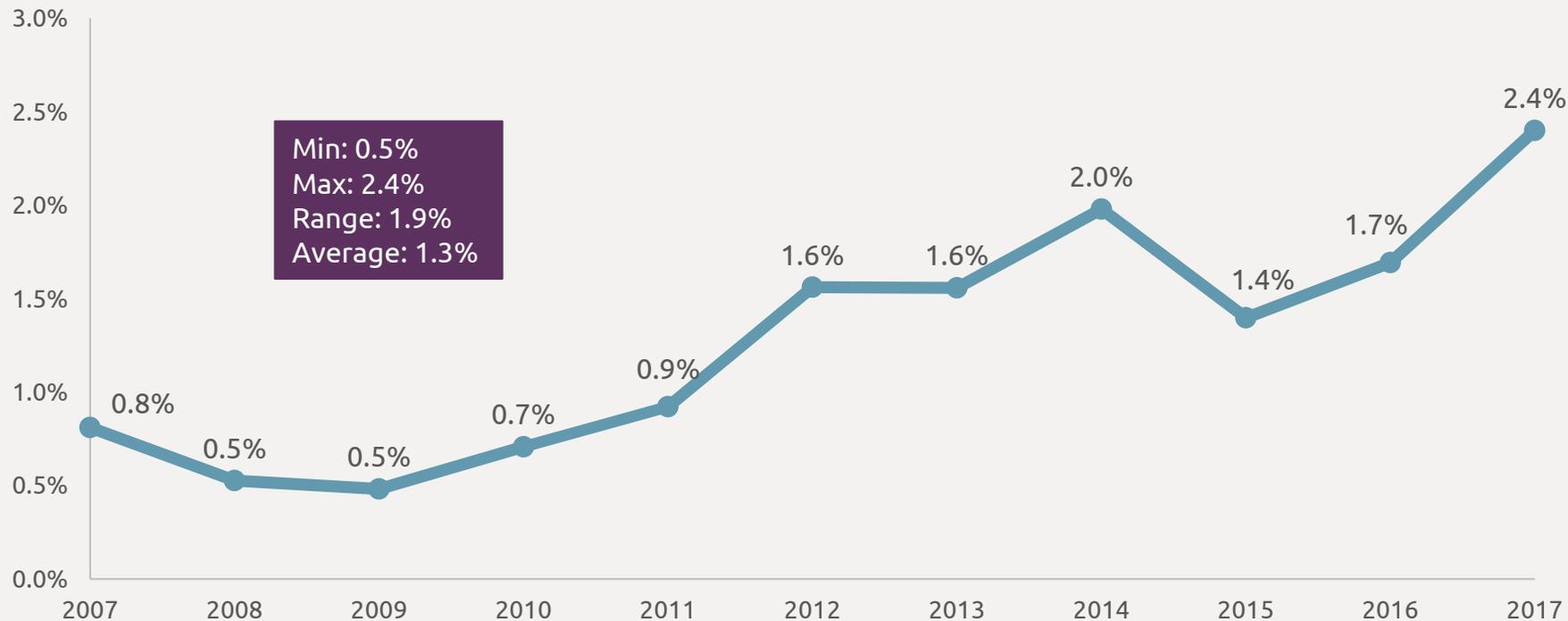
Percent matched



<p><b>Country:</b> Ireland  <b>Matched:</b> 23.60%  <b>Final participation:</b> 197</p>	<p><b>Country:</b> Iran  <b>Matched:</b> 7.30%  <b>Final participation:</b> 163</p>	<p><b>Country:</b> Pakistan  <b>Matched:</b> 4.14%  <b>Final participation:</b> 147</p>	<p><b>Country:</b> Egypt  <b>Matched:</b> 2.92%  <b>Final participation:</b> 133</p>	<p><b>Country:</b> India  <b>Matched:</b> 4.14%  <b>Final participation:</b> 113</p>	<p><b>Country:</b> Australia  <b>Matched:</b> 6.81%  <b>Final participation:</b> 61</p>	<p><b>Country:</b> Saint Kitts and Nevis  <b>Matched:</b> 3.16%  <b>Final participation:</b> 89</p>
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Unmatched and unfilled

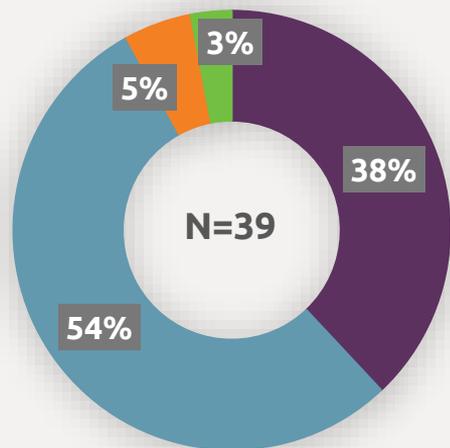
# Unmatched current year CMGs after second iteration (2007-2017)



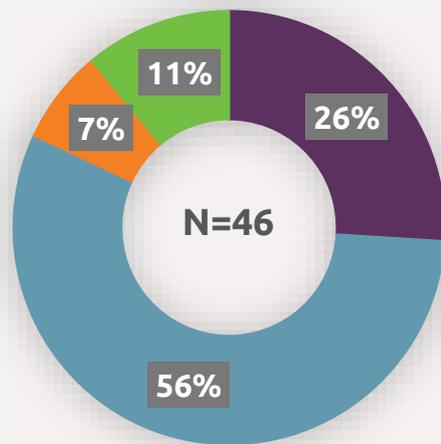


# Categorizing unmatched CMGs

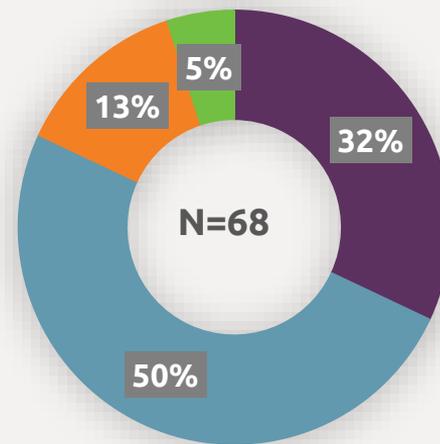
## 2015



## 2016



## 2017



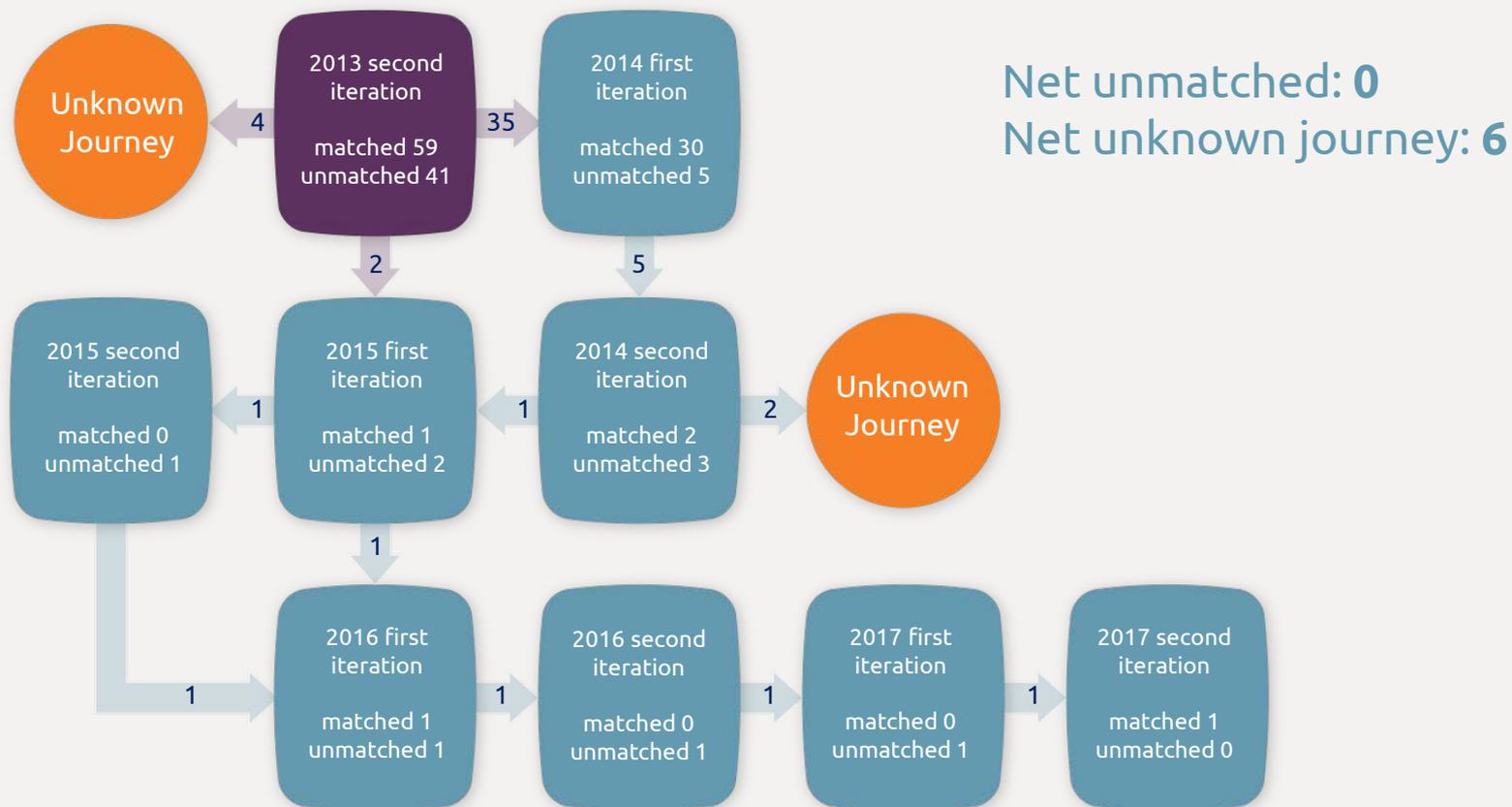
■ Applicants ranked by no programs

■ Applicants ranked by some programs but programs filled before rank

■ Applicants ranked by all programs but programs filled before rank

■ Applicants who could have matched but did not rank the program

# Unmatched CMG journey (2013)



# Unmatched CMG summary

New

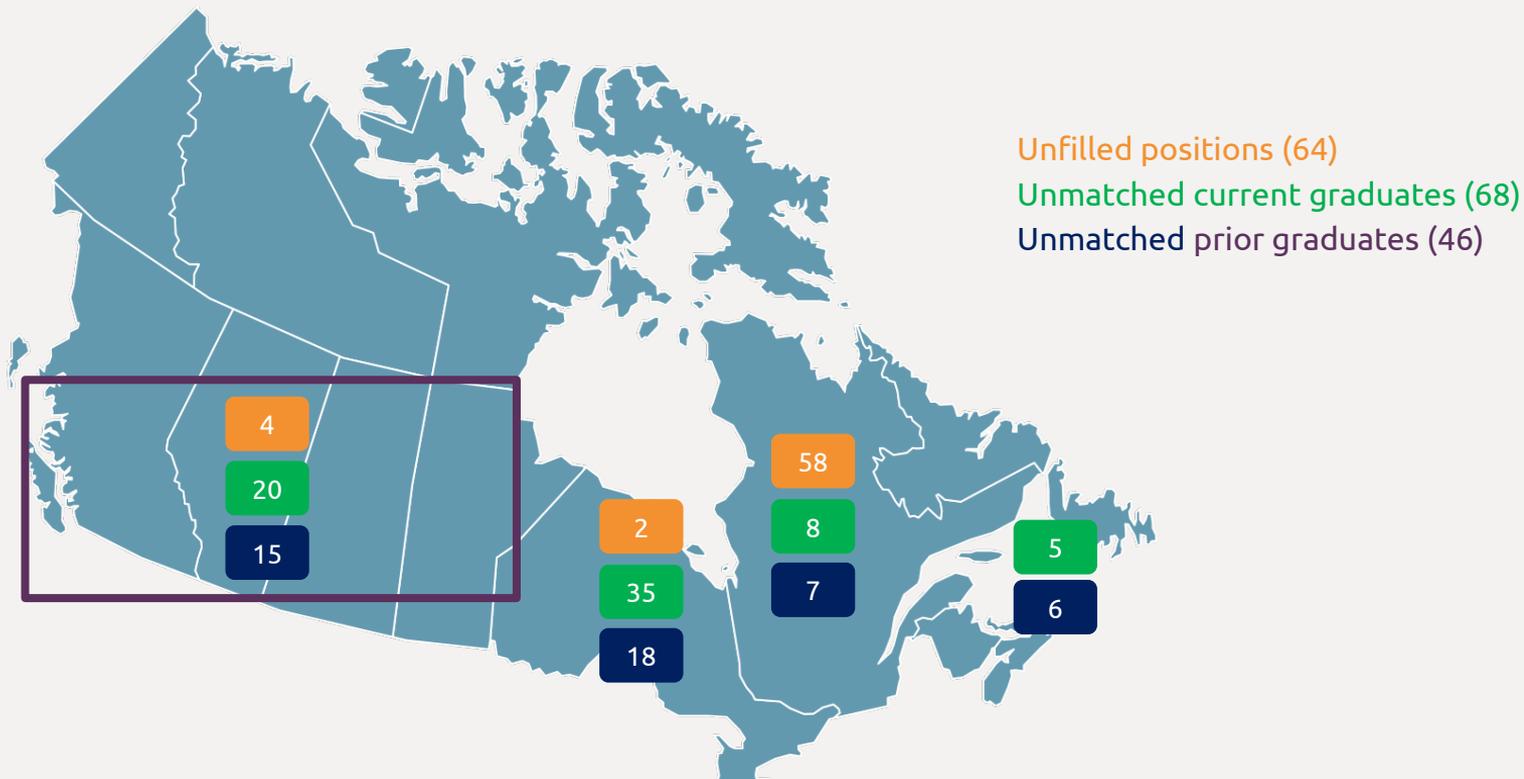
Match year	Participants	% matched in match year	Number unmatched (1 <sup>st</sup> and 2 <sup>nd</sup> )	Number subsequently matched	% matched to date	Remaining unmatched	Unknown journey
2013	2,635	97.57	62	49	99.43	1	14
2014	2,781	97.45	71	51	99.28	2	18
2015	2,792	97.71	64	51	99.53	5	8
2016	2,838	97.29	77	59	99.37	8	10

# Unfilled positions by discipline

Discipline	After first iteration	After second iteration
Family medicine	158	56
Psychiatry	10	1
PHPM	7	-
Radiation Oncology	7	-
Anatomical Pathology	5	3
General Pathology	4	-
Internal medicine	4	-
Medical microbiology	4	2
Diagnostic Radiology	3	-
Nuclear Medicine	3	-
Hematological Pathology	2	1

Discipline	After first iteration	After second iteration
Medical Genetics	2	-
Neuropathology	2	1
Pediatrics	2	-
Dermatology	1	-
Medical Biochemistry	1	-
Neurology	1	-
Neurology - Pediatric	1	-
Physical Med & Rehab	1	-
Urology	1	-
<b>TOTAL</b>	<b>219</b>	<b>64</b>

# Unfilled positions and unmatched graduates after second iteration, by region



# Unfilled positions and unmatched graduates after second iteration, by language

Unfilled  
positions

**French**  
**58**

**English**  
**6**

Unmatched  
current year  
graduates

**French**  
**2**

**Bilingual**  
**4**

**English**  
**62**

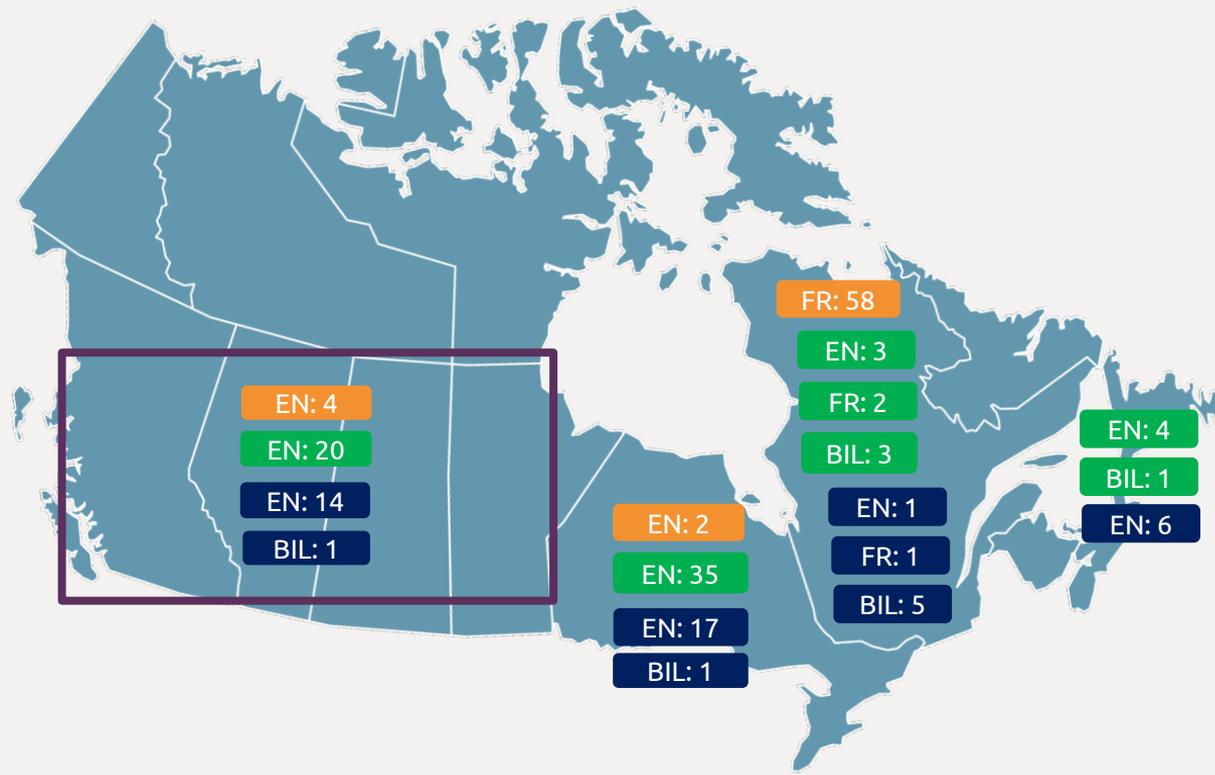
Unmatched  
prior year  
graduates

**French**  
**1**

**Bilingual**  
**7**

**English**  
**38**

# Unfilled positions and unmatched graduates after second iteration, by language



## Unfilled positions (64)

English (6)

French (58)

## Unmatched current grads (68)

English (62)

French (2)

Bilingual (4)

## Unmatched prior grads (46)

English (38)

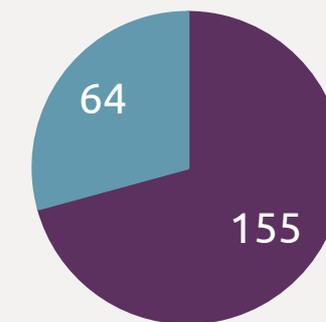
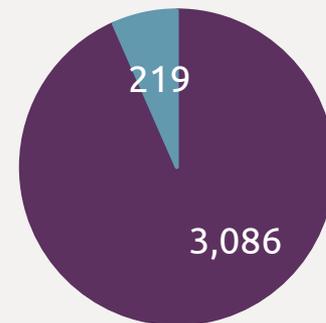
French (1)

Bilingual (7)

# Revisiting the 2017 R-1 match national highlights

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■ Filled ■ Unfilled



## Available positions and applicant interest

- When factoring in prior year participants – ratio is 1.02 for last two years
- Increased demand for Internal Medicine creates tipping point
- Interactive data provides discipline level insights



## Program applications

- Continued increase
- Significant program effort in selection process evident in #s



## Regional and language specific data

- Regional and language oriented data provides a new perspective in important areas



## Unmatched Canadian graduates

- Current year increase
- Ultimate match % consistent over past four years

Thank you

