

Introduction

- Physician assistants (PAs) are medically trained, highly skilled health care professionals (HCPs) who work in collaboration with supervising physicians (SPs) to reduce wait times, increase access to quality-care, and alleviate HCP burnout
- PAs are trained as medical generalists, allowing them to provide a wide range of services to extend those of their SPs.
- PAs scope of practice (SoP) is defined by their collaborative relationship with a supervising physician (mirrors their scope)
- Currently, there are only 3 Canadian PA training programs (McMaster University and University of Toronto offers a BScPA; University of Manitoba offers a MScPA) graduating approximately 70 students annually.
- PA education programs are 2 years in length; 1 year of clinical sciences + 1 year of clinical rotations
- Currently at McMaster University, 2nd-year students have 7 mandatory rotations and 2 elective rotations

Objectives

- To examine the types of elective rotations McMaster University PA students choose
- Identify any trends regarding choice of specialties, location of clinical setting, and type of supervising HCP

Methods

- Elective rotation data was collected from McMaster University PA students from 2009-2022 through the PA program clerkship evaluation system
- Data was cross-checked against year-to-year clerkship schedules through the PA program office
- Data was obtained from graduating Class of 2010 (2009-2010) to Class of 2023 (2022-2023)
- Data was made anonymous by removing student names

Discussion

- Although emergency medicine is a mandatory 4-week rotation, it is the most popular elective rotation choice
- Once pediatrics became a mandatory rotation in 2012, the number of students choosing it as an elective drops from an average of 9/year (2009-2011) to 3/year (2021-2023)
- The percent of PA preceptors is on a steady rise since 2017
- Majority of students choose to do their elective rotations within Ontario, Canada (directly funded)

Class of / # of weeks per specialty	2010	2011	2012-2018	2019-2022
Family medicine	12	12	12	12
Internal medicine	6	6	6	6
Surgery	6	6	6	6
Psychiatry	4	6	6	6
Emergency medicine	4	4	4	4
Pediatrics	N/A	N/A	4	4
Geriatrics	N/A	N/A	N/A	2
Electives	16 (4 x 4-week rotations)	14 (3 x 4 week rotations + 1 x 2-week rotation)	10 (2 x 4 week rotations + 1 x 2-week rotation)	8 (2 x 4 week rotations)
Notes	1 of 4 electives must be in primary care			Class of 2020: Affected by COVID-19, refer to methods

Table 1. The number of weeks per mandatory and elective rotations organized by graduating class. The grey spaces indicate the specialties of the 5-7 mandatory rotations required of PA students to graduate.

Results

Specialty choices

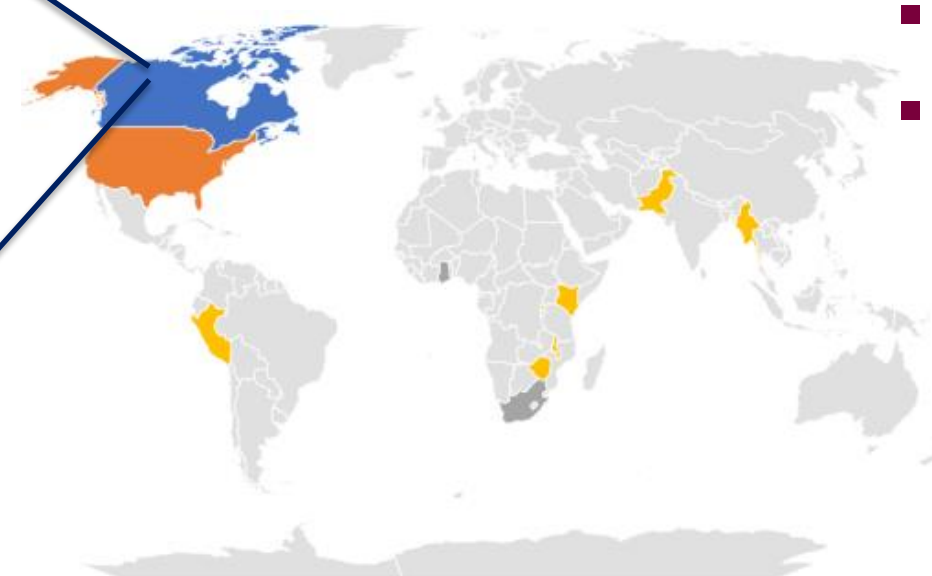
- Most popular specialties
 - Emergency medicine (16%)
 - Family medicine (11%)
 - Obstetrics + gynecology (8%)
 - Orthopedic surgery (8%)
 - Pediatrics (5%)

Specialty	# of rotations
Medicine + subspecialties	288
Surgery + subspecialties	154
Emergency medicine + urgent care	138
Primary care/Family Medicine	98
Ob/Gyn + reproductive medicine	74
Pediatrics	43
Critical care	21
Psychiatry	19
Anesthesia	17
International medicine	8
Pain management	7
Radiology	7
Forensic pathology	1
	875

Table 3. Number of rotations per specialty group across all graduating classes between 2009-2023 (n=875)

Provinces	# of rotations
Alberta	5
British Columbia	3
Manitoba	7
New Brunswick	2
Newfoundland and Labrador	4
Nova Scotia	8
Ontario	829
	858

Figure 2. International and provincial locations of elective rotations across all graduating classes between 2009-2023 (n=875)



Trends in Preceptor Demographics

- 2009-2016: MD (100%)
- 2017-2019: PA (7-20%), MD (79-93%)
- 2020 (COVID-19): MD (100%)
- 2021-2023: PA (25-36%), MD (64-75%)

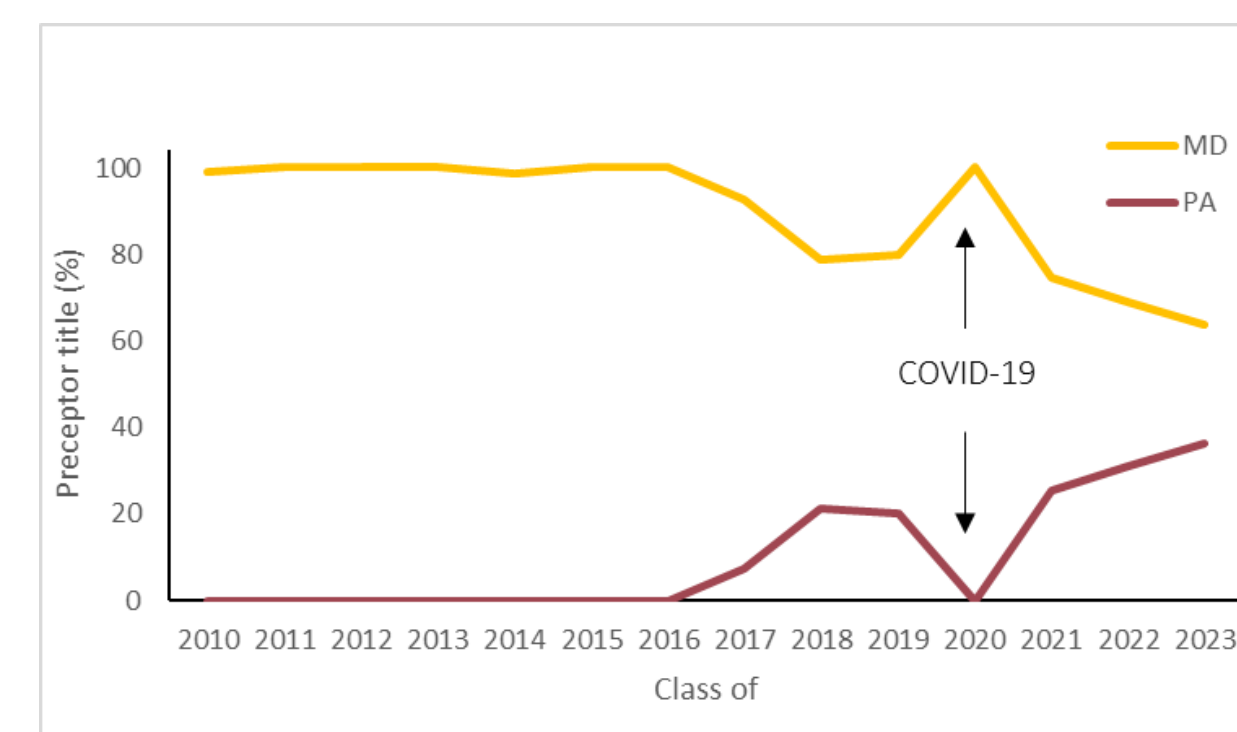


Figure 1. The percentage of MD and PA preceptors across all graduating classes between 2009-2023 (n=875). Other HCP preceptors (e.g., Midwife) not shown.

Geographical location

- Canada (98%)
- International electives (2%)
 - E.g., USA, South Africa, Ghana, Pakistan, Malawi, Zimbabwe, Peru, Burma, Rwanda, Kenya, Himalayas

Future directions

- Expand dataset to include University of Toronto and University of Manitoba PA students
- Determine factors that contribute to the elective decision-making process (i.e., distance, preceptor reviews from past students)
- Investigate how many students received job offers from their elective rotations
- Evaluate preceptor satisfaction with PA students regarding competency, professionalism, and eagerness to learn