

Background

There have been repeated calls to produce a physician workforce that meets the needs of Canadians. While efforts work toward producing the right number, mix and distribution of physicians, we have yet to integrate key data into a cohesive view that informs decision-making and helps to evaluate progress toward intended workforce goals.

Objectives

The Royal College Medical Workforce Knowledgebase (MWK) integrates authoritative physician workforce data to:

1. Provide one-stop access to key physician workforce supply trends
2. Highlight areas of potential physician workforce change
3. Establish a forum for specialist workforce analysis and discussion

Methods

The MWK integrates comprehensive data from five pan-Canadian physician workforce data sources (Figure 1). Data from 2010 to 2014 measures trends at key workforce supply junctures. The MWK covers 31 primary specialties, grouped within the broad categories of Family Medicine, Medical, Surgical and Laboratory disciplines.

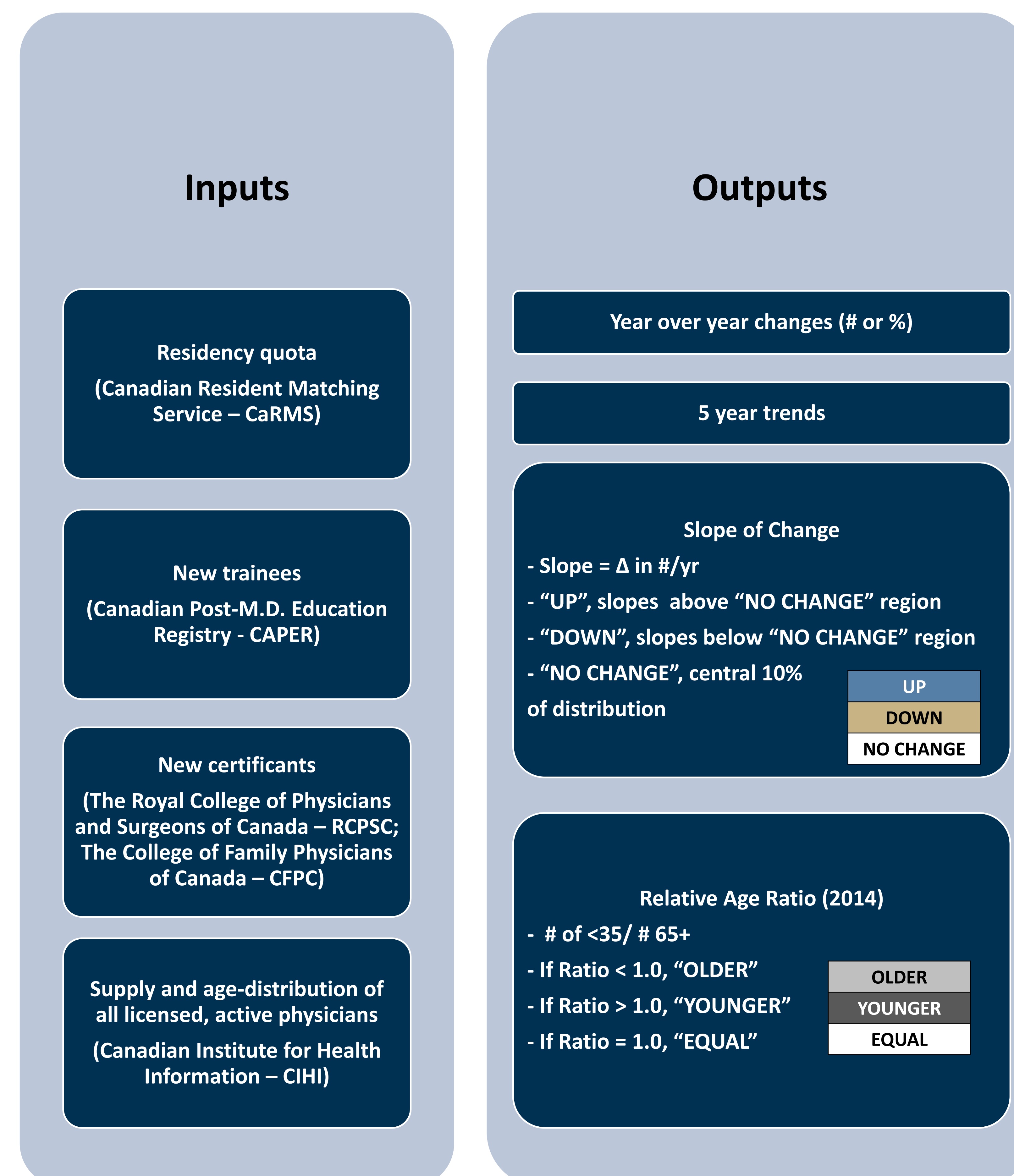


Figure 1 – Production of Medical Workforce Knowledgebase (MWK) physician supply outputs based on five authoritative data sources (inputs)

Results

The MWK supply overview provides a high level snapshot of what is happening with Canada’s physician workforce. Table 1 provides select Royal College specialty examples from the MWK while Table 2 presents the physician supply metrics at a global level.

Table 1 – MWK supply overview using select Royal College specialties, Canada, 2010-2014

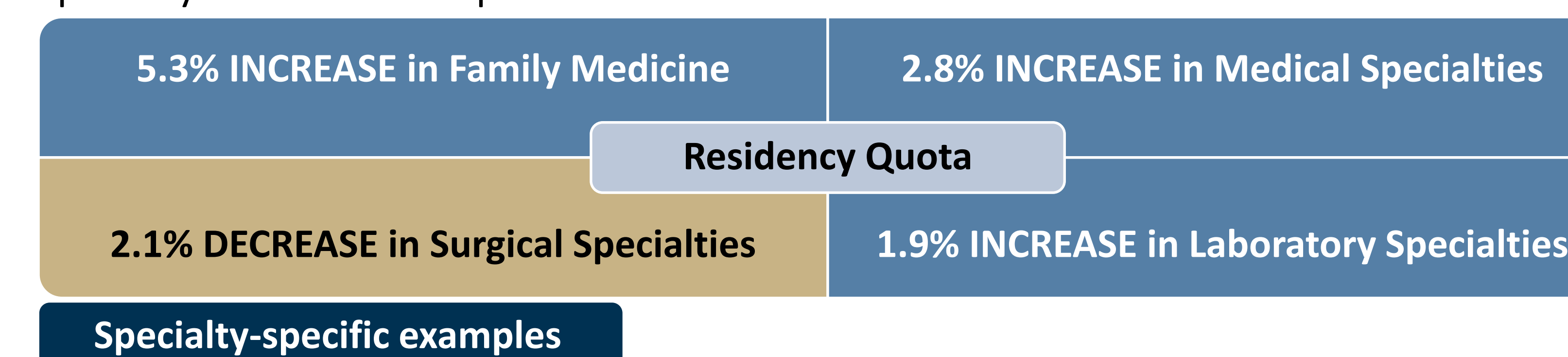
	R1 Quota (Δ in #/yr)	New Trainees (Δ in #/yr)	New Certificants (Δ in #/yr)	Licensed Physician Workforce (Δ in #/yr)	Relative Age Ratio (<35/65+)
Emergency Medicine	3.4	2.7	9.0	35.9	2.9
General Surgery	-4.6	-6.5	4.8	30.4	0.7
Ophthalmology	0.5	0.9	-1.0	23.7	0.5

Table 2 – Global physician supply overview, Canada, 2010-2014

	R1 Quota (Δ in #/yr)	New Trainees (Δ in #/yr)	New Certificants (Δ in #/yr)	Licensed Physician Workforce (Δ in #/yr)	Relative Age Ratio (<35/65+)
Family Medicine	71.2	71.5	111.1	1345.3	1.0
Overall (RCPSC Only)	27.5	16.7	101.6	768.9	0.7
Overall (RCPSC & CFPC)	98.7	88.2	212.7	2114.2	0.9

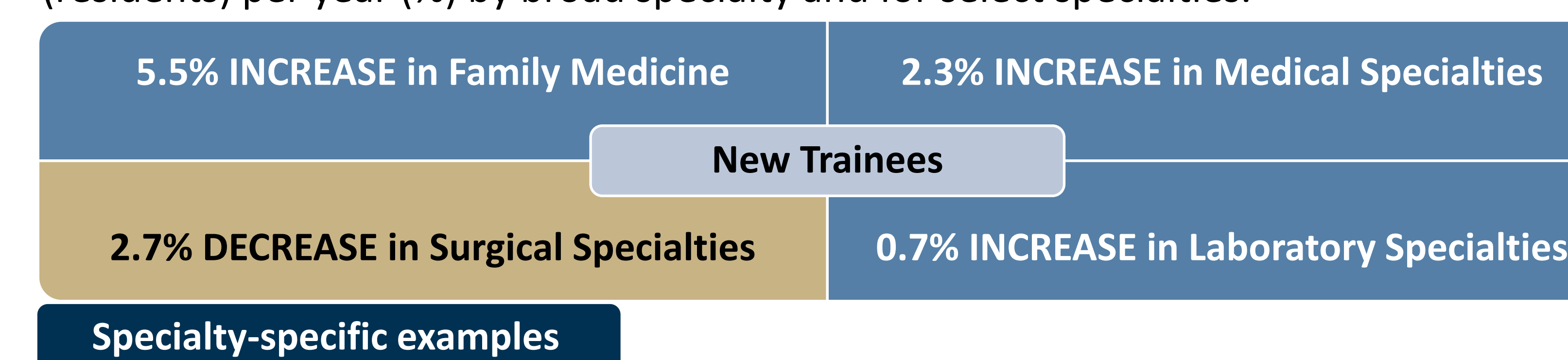
Residency Quota, Canada, 2010-2014

This data series shows the average change in residency quota per year (%) by broad specialty and for select specialties.



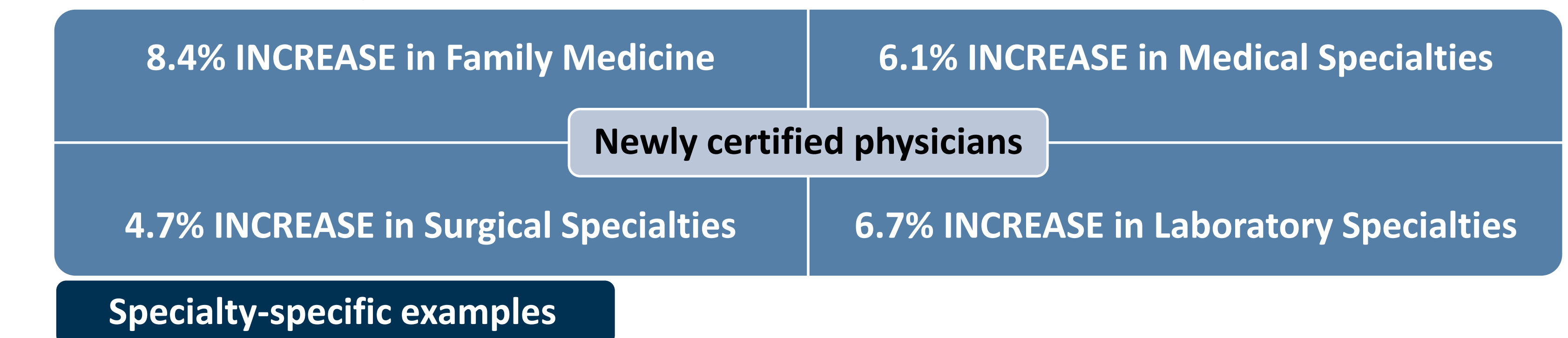
New Trainees, Canada, 2010-2014

This data series shows the average change in first year (PGY1) post-M.D. trainees (residents) per year (%) by broad specialty and for select specialties.



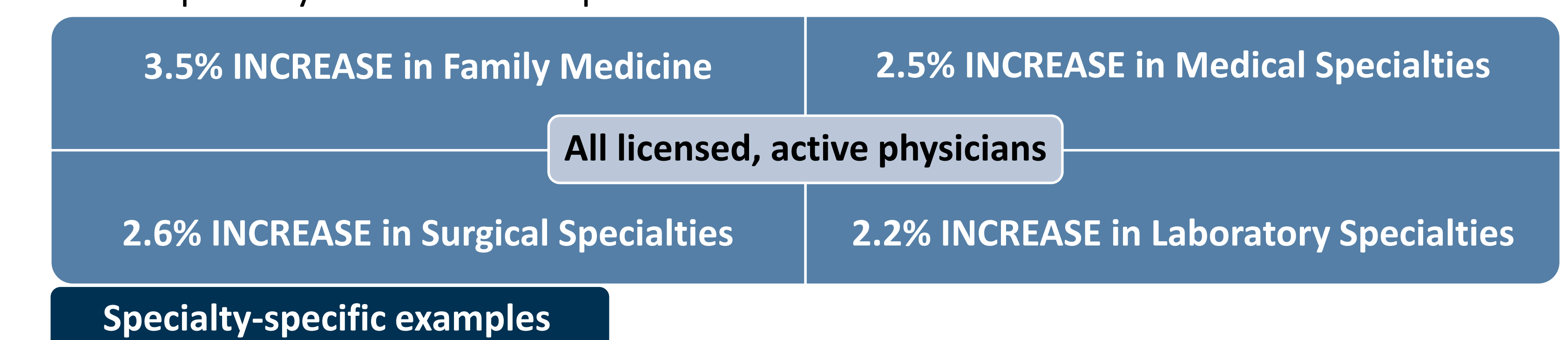
Newly certified physicians, Canada, 2010-2014

This data series shows the average change in physicians who are certified by the CFPC or the Royal College per year (%) by broad specialty and for select specialties.



Supply of all licensed, active physicians, Canada, 2010-2014

This data series shows the average change in licensed, active physicians per year (%) by broad specialty and for select specialties.



Age distribution of all licensed physicians, Canada, 2014

- Overall, 14.9% of all licensed physicians are aged 65+ and 12.9% are aged <35
- Some specialty workforces are relatively young; 21.5% of Emergency Medicine physicians are <35 years old
- Some specialty workforces are relatively older; 22.8% of Dermatologists and 20.3% of Ophthalmologists are aged 65+

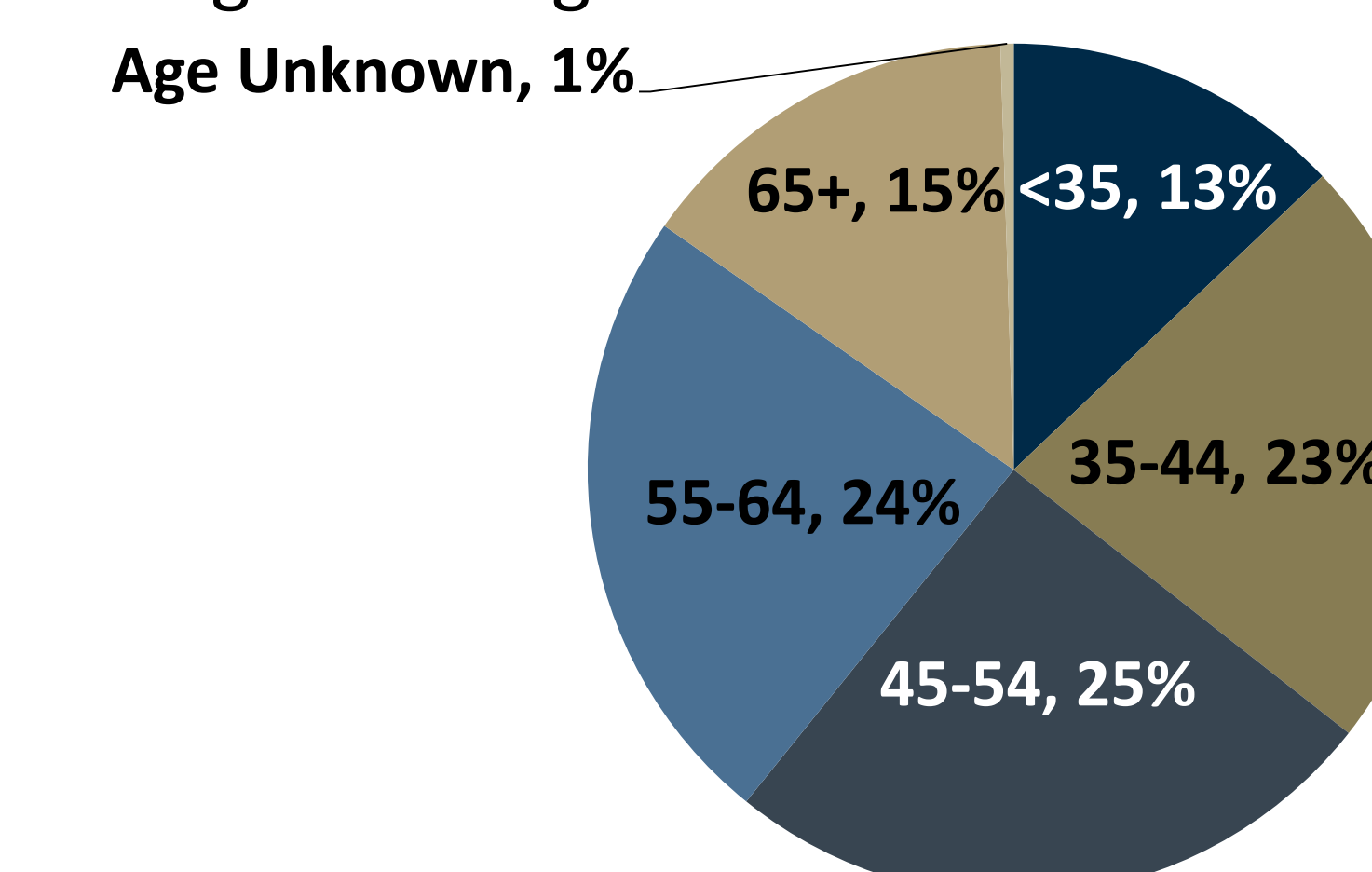


Figure 5 – Age distribution of all licensed, active physician in Canada, stratified by age group, 2010-2014

Conclusions

- The physician supply indicators offer decision-makers relevant information for monitoring medical workforce change at various stages of training and practice
- With its initial focus on supply, the MWK plans to evolve to cover subspecialties and other important factors, such as physician workload and functional specialty as well as patient needs and health outcomes