## Disparities in cataract surgery volumes among Ontario's ophthalmologists

William Hodge MD PhD, Efstathia Kiatos BSc

■ Cite as: CMAJ 2017 March 20;189:E422-3. doi: 10.1503/cmaj.161140

See related article at www.cmaj.ca/lookup/doi/10.1503/cmaj.150674

n a linked population-based cohort study, Campbell and colleagues¹ investigate how patient-based remuneration under health system funding reform in Ontario has affected the surgical practice of recent graduates in ophthalmology. The authors of this well-done study found that the number of cataract operations performed by recent graduates decreased from a high of 147 cases per quarter before 2007 to 37 cases per quarter after 2007.

There is no doubt that recent graduates' opportunity to perform cataract surgery decreased in or around 2007, according to a simple analysis of descriptive data and the anecdotal experience of graduates of ophthalmology programs in Canada. The authors of the linked study have analyzed the trend rigorously. They identify cataract surgery as a resource-intensive procedure and compare it with non-resource-intensive procedures like laser iridotomy and consultation, observing that similar declines did not occur for these latter procedures. What is less clear, however — and has not been clarified by this study — is why this happened and whether it will (or already has started to) self-correct or if decisive action on the part of the government will be needed to correct or adjust the phenomenon.

There are other potential explanations for the pattern observed by Campbell and colleagues.¹ Policies related to specialist workflow and new graduates have changed many times over the past 25 years. In 1992, Barer and Stoddart² concluded that there was a surplus of physicians in Canada. Later that year, the Ontario government decided to cut medical school enrolment by 10%. In December 1999, another report³ concluded that more physicians were needed, and Ontario medical schools then doubled their enrolment. By the time those greater numbers of medical students graduated as specialists from their residencies, it would have been the mid-2000s. It is possible that this merely resulted in a surplus of ophthalmologists for which insufficient work was available.

Furthermore, it is important to note that physicians are no longer legally required to retire from providing surgical services at the age of 65 years.<sup>4-6</sup> This change occurred in Canada over the period 2006 to 2012, at both the provincial and the federal

## **KEY POINTS**

- Young ophthalmologists have suffered disproportionately from allocation constraints on cataract surgery in recent years.
- This phenomenon is complex and multifactorial.
- Ongoing data surveillance will be needed to understand it fully.

levels. This move away from ageism likely had a major effect on the cataract surgery workforce starting around 2007. Those not retiring at age 65 may be keeping up a relatively high cataract surgical volume, independent of policy, probably at the expense of new graduates without established practices. This phenomenon is likely to self-correct as the older cohort of ophthalmologists inevitably retires, albeit later than in previous decades, with the result that younger ophthalmologists will be able to increase their relative cataract surgical volumes. The authors of the current study show this graphically, and it appears that the surgical volumes of younger ophthalmologists started to pick up again in 2012.

Although young ophthalmologists' opportunity to perform cataract surgeries certainly decreased in or around 2007, the reasons are probably many. It is highly unlikely that this phenomenon was wholly dependent on the number of cataract surgeries allowed by the government in any one year. Further analyses of similar data over the next few years will show whether the situation is self-correcting.

## References

- Campbell RJ, El-Defrawy SR, Bell CM, et al. Effect of cataract surgery volume constraints on recently graduated ophthalmologists: a population-based cohort study. CMAJ 2016 Dec. 5. [Epub ahead of print].
- Barer ML, Stoddart GL. Toward integrated medical resource policies for Canada: 1. Background, process and perceived problems. CMAJ 1992;146:347-51.
- McKendry R. Physicians for Ontario: Too many? Too few? For 2000 and beyond [ministry report]. Toronto: Ontario Ministry of Health and Long-Term Care; 1999.

All editorial matter in CMAJ represents the opinions of the authors and not necessarily those of the Canadian Medical Association or its subsidiaries.

- Pong RW. Putting away the stethoscope for good? Toward a new perspective on physician retirement. Ottawa: Canadian Institute for Health Information; 2011. Available: https://secure.cihi.ca/estore/productFamily.htm?locale =en&pf=PFC1609 (accessed 2016 Oct. 21).
- CMA Masterfile: Number of physicians by specialty and age, Canada, 2007.
  Ottawa: Canadian Medical Association; 2007 Available: https://www.cma.ca/Assets/assets-library/document/en/advocacy/policy-research/physician-historical-data/2007-02-spec-age.pdf (accessed 2016 Oct. 21).
- The end of mandatory retirement [fact sheet]. Toronto: Ontario Human Rights Commission. Available: www.ohrc.on.ca/en/end-mandatory-retirement-fact -sheet (accessed 2016 Oct. 21).

Competing interests: None declared.

This article was solicited and has not been peer reviewed.

**Affiliation:** Department of Ophthalmology, University of Western Ontario, London, Ont.

**Contributors:** William Hodge and Efstathia Kiatos made substantial contributions to the conception and design of the work; to the acquisition, analysis and interpretation of data; and to drafting the work and revising it critically for important intellectual content. Both of the authors gave final approval of the version to be published and agreed to serve as guarantors of the work.

Correspondence to: William Hodge, william.hodge@sjhc.london.on.ca