



# Prioritizing Eye Health for Canadians & System Readiness

Monday Oct 23rd  
1pm-2pm

MaRS District  
101 College St, Toronto, ON



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Hon. Judy Sgro

# Vision Loss Affects Us All

8  
Million

Canadians are living with an eye disease that puts them at risk for blindness

1.2  
Million

Canadians are living with vision loss

14  
Million

Canadians will have some form of a blinding eye disease by 2050



# **Vision Health in Canada 2023**

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Canadian Council of the Blind

# A Profile of Vision Loss in Canada 2019 - Background

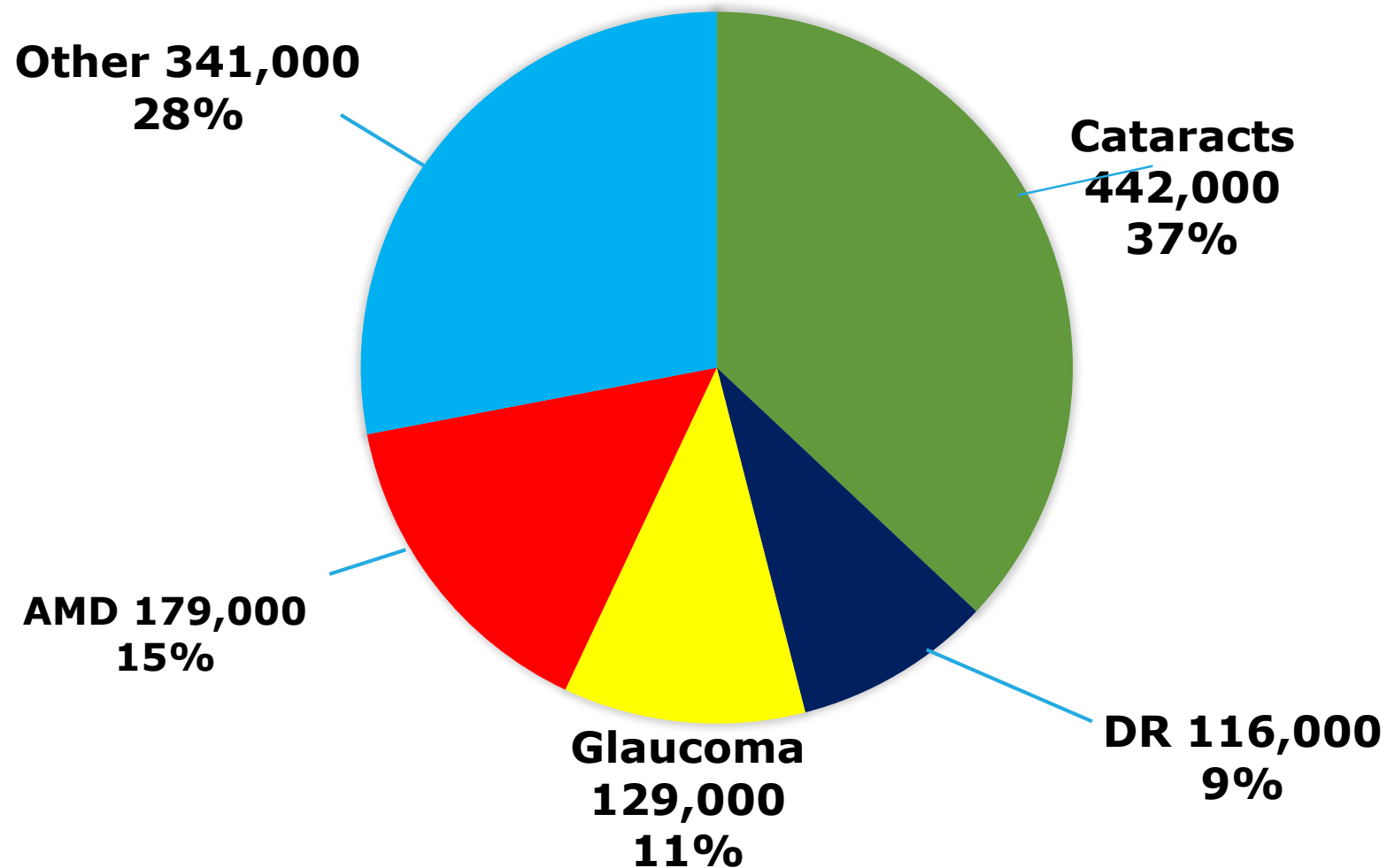
- There is very little current data available in Canada on the prevalence and cost of vision loss. There are no large-scale population health studies. Most available data is obtained from projections from studies done in other jurisdictions.
- In order to update the profile of vision loss in Canada, in late 2020, the Canadian Council of the Blind (CCB) commissioned an updated assessment of the prevalence and cost of vision loss using 2019 data
- The results were reported in May 2021

# A Profile of Vision Loss in Canada 2019

- There are an estimated 1.2 million Canadians living with VL, representing 3.2% of the total population.
  - 49,500 are blind (4.1% of people with VL) (BCVA  $\leq$  20/200)
  - 417,600 (34.6%) have moderate VL (BCVA 20/60 – 20/200)
  - 738,400 (61.3%) have mild VL, (BCVA 20/40 – 20/60)
- 54% of people with VL are 65 years of age or over
- About one in 5 people over 85 have VL (20.9%)



# Prevalence of VL by Major Cause



# Prevalence of Major Eye Diseases in Canada 2019

- More than 8.0 million Canadians are living with an eye disease that may lead to blindness.
  - 2.5 million are living with AMD
  - 3.7 million are living with cataracts
  - 1.0 million are living with diabetic retinopathy
  - 728,000 are living with glaucoma

# Cost of VL and Blindness in Canada - 2019

➤ The total cost of VL in Canada in 2019 was \$32.9 billion, consisting of:

- Total financial cost of \$15.6 billion
  - Direct Health System Costs: \$9.5 billion
  - Productivity losses: \$4.3 billion

➤ Lost well-being cost of \$17.4 billion

➤ The direct health system costs of falls due to vision loss was estimated to be \$105.3 million.

➤ The cost of VL in Canada will grow from \$32.9 billion in 2019 to \$56 billion (in 2019 dollars) in 2050



# Report Card on Vision Health in Canada 2021

Vision Health has not returned to pre-pandemic levels

- There were a total of 108,000 fewer ophthalmic surgeries performed in Canada in 2021 compared with 2019. The backlog continues to grow.
- Despite government infrastructure funding, challenge with health professional staffing leading to barriers to return to pre-pandemic service levels.
- Wait times for cataract surgery had not returned to pre-pandemic levels
- Total ophthalmic pharmaceutical claims were 11.7% fewer than would have been expected if growth had continued at the pre-pandemic rate.

# Report Card on Vision Health in Canada 2021

Vision Health has not returned to pre-pandemic levels

- Two thirds of Canadians have not had an eye examination within the past year
- It is estimated the total number of optometrist visits missed in 2021 compared to 2019 was 1.8 million, which continues to put millions of Canadians at serious risk of losing vision.
- The backlog has led to severe, and in some cases irreversible vision loss, for certain Canadians living with blinding eye diseases.

# Report Card on Vision Health in Canada 2021

## Impact of the pandemic on people living with VL

- At the start of the COVID-19 pandemic (April 2020), the CCB surveyed people who were blind, deaf-blind, or partially-sighted to assess the effect that the pandemic was having on their lives.
- In June and July of 2022, a very similar survey was conducted in order to assess the impact of the pandemic on the vision loss community at this stage in the pandemic.
- Results:
  - A community under far less stress than at the early stages of the pandemic
  - Greater comfort with going out, social distancing etc.
  - Better vaccination rates than the general population

# State of Vision Health in Canada 2023

## Summary:

- Vision Health in Canada is in crisis.
- Prevalence of eye diseases were high and wait times for surgery and treatment were less than optimal prior to the pandemic.
- The Report Card showed that as of 2021 we had not returned to pre-pandemic service levels.
- Canada is in serious need of an active National Eye Health Strategy to manage the current situation

# Prioritizing Eye Health for Canadians and System Readiness

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# Clinician Perspective

1. Prevalence of eye diseases amongst Canadians
2. Current and projected trends of trained ophthalmologists
3. Challenges for delivering effective eyecare for Canadians



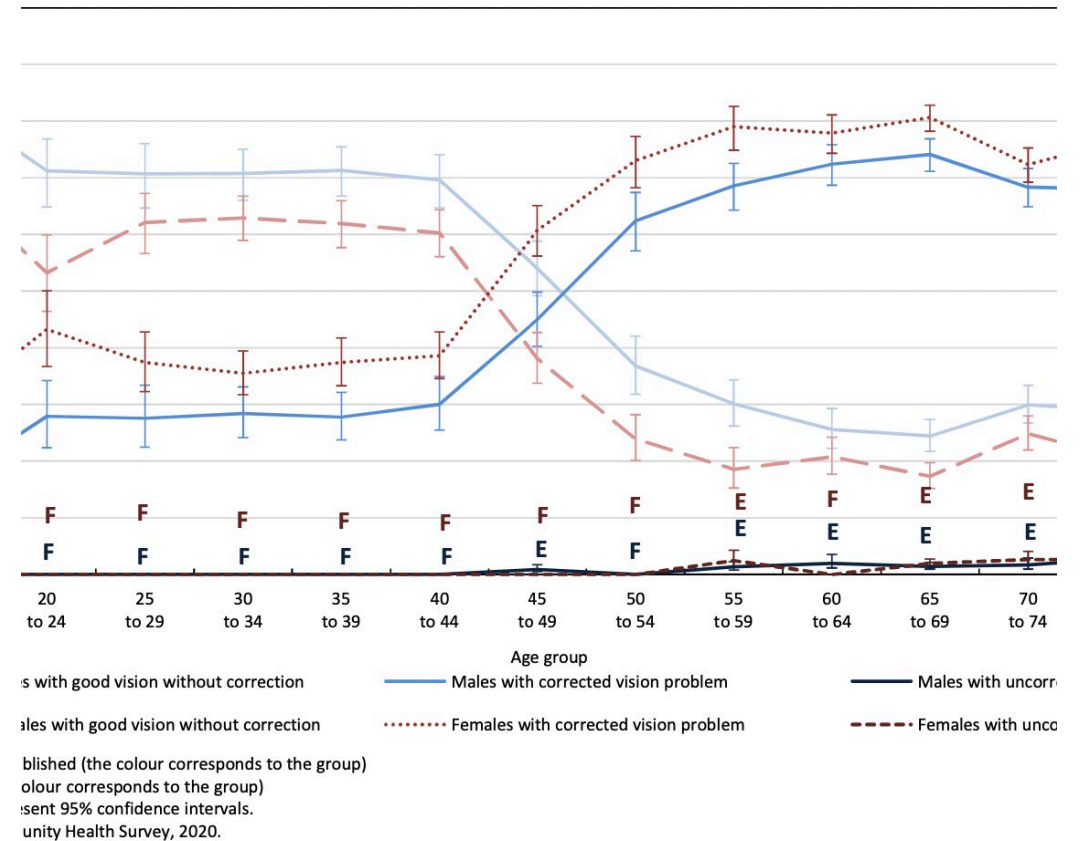
# Self Reported Eye Health, Canada, 2020

Good vision without correction decreases with age

Corrected or uncorrected vision problems increase with age

Females are more likely to report poor vision compared to males

Health by sex and age, household population aged 12 or older, Canada, 2020



# Causes of majority of vision loss in Canada

1. **Age related macular degeneration**
2. Cataract
3. **Diabetic retinopathy**
4. Glaucoma
5. Refractive error



# Why is EARLY diagnosis

Leading cause of blindness amongst elderly in developed nations

# important?

In Canada 2.5 million people are affected by AMD, where 1 in 10 will develop nAMD

Delayed diagnosis can lead to:

- Subretinal fibrosis, disciform scarring and atrophy

- Irreversible vision loss

- Decreased quality of life

- Increased burden on healthcare system

# Prevalence of Diabetes in Canada

11.7 million Canadians are living with diabetes or pre-diabetes

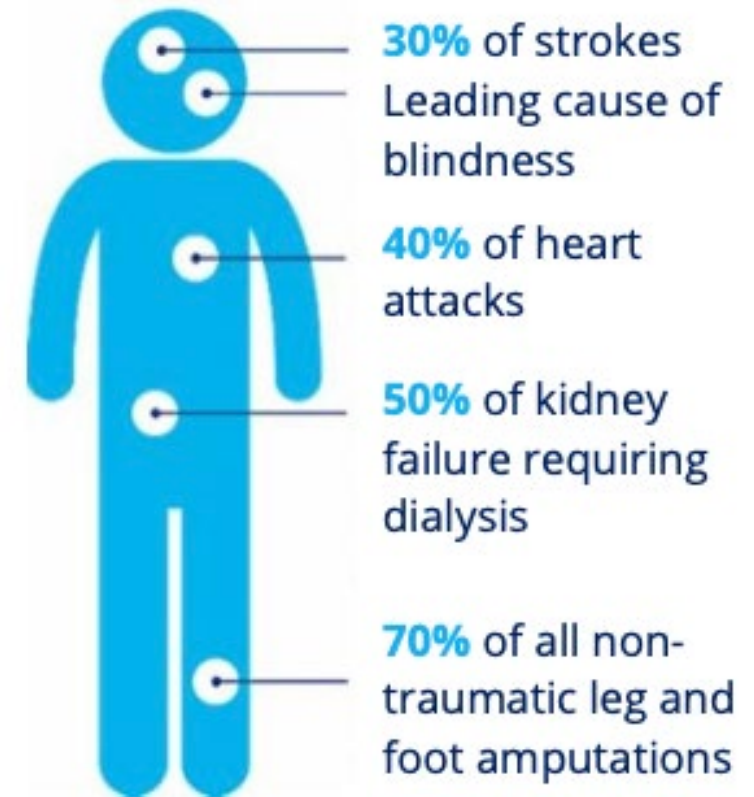
All cause mortality is 2x as high as those without diabetes

Those with diabetes are hospitalized

- 3x more with cardiovascular disease

- 12x more with end-stage renal disease

- 20x more for non-traumatic limb amputation

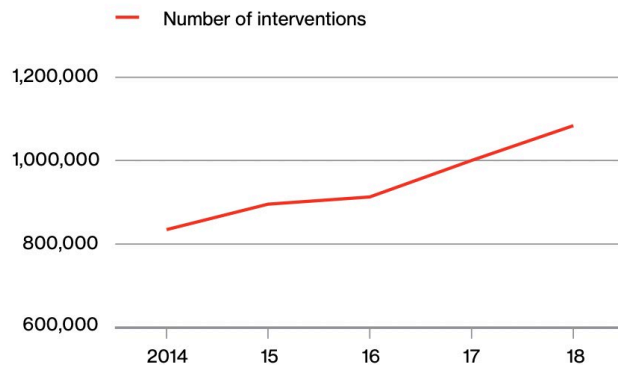


# Diabetic Retinopathy

- Is the leading cause of vision loss in people of working age
- Vision loss is associated with increased falls, hip fractures, and a 4-fold increase in mortality
- The prevalence of diabetic retinopathy is approximately **25.1%** in Canada

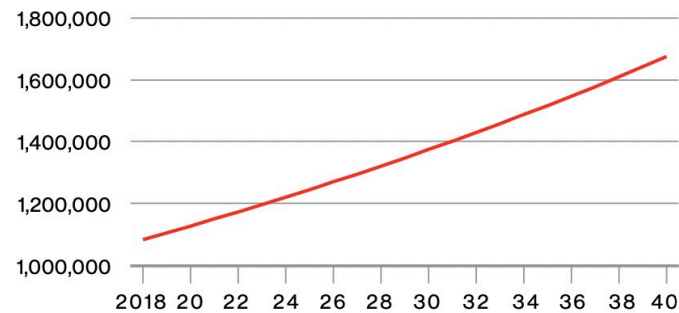
# Ophthalmic Procedures in Canada

**Chart 1**  
**Number of ophthalmic interventions increasing**



Sources: Canadian Institute for Health Information; IQVIA; The Conference Board of Canada.

**Chart 3**  
**Demand for ophthalmic interventions projected to increase**  
(number of interventions)



Sources: Canadian Institute for Health Information; IQVIA; The Conference Board of Canada.

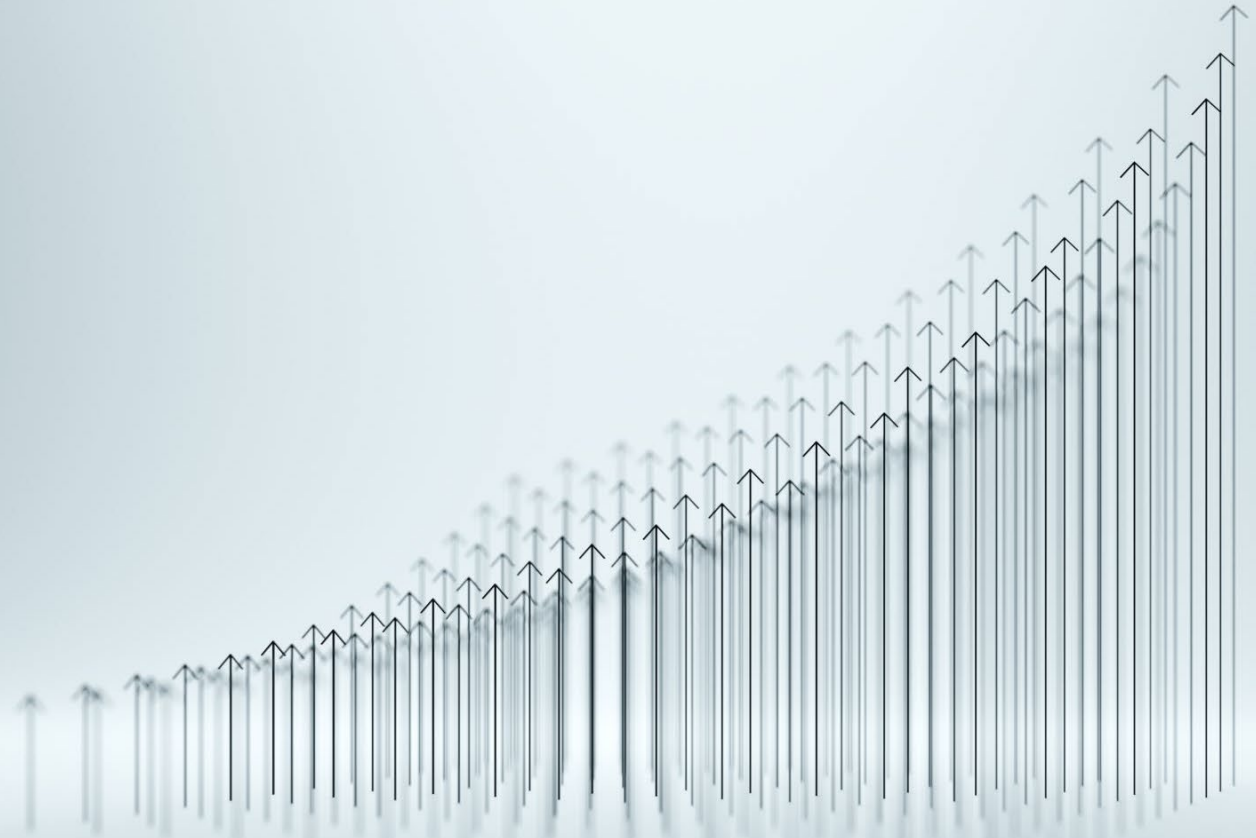
**Table 1**  
**Ophthalmologists performed over 1 million ophthalmic interventions in 2018**

	Number of interventions
Anti-VEGF injections for AMD*	631,129
Cataract surgery	415,923
Glaucoma surgery	18,438
Eye muscle surgery for strabismus	10,429
Vitrectomy surgery for diabetic retinopathy	4,056
Corneal transplantations	3,413
<b>Total</b>	<b>1,083,388</b>

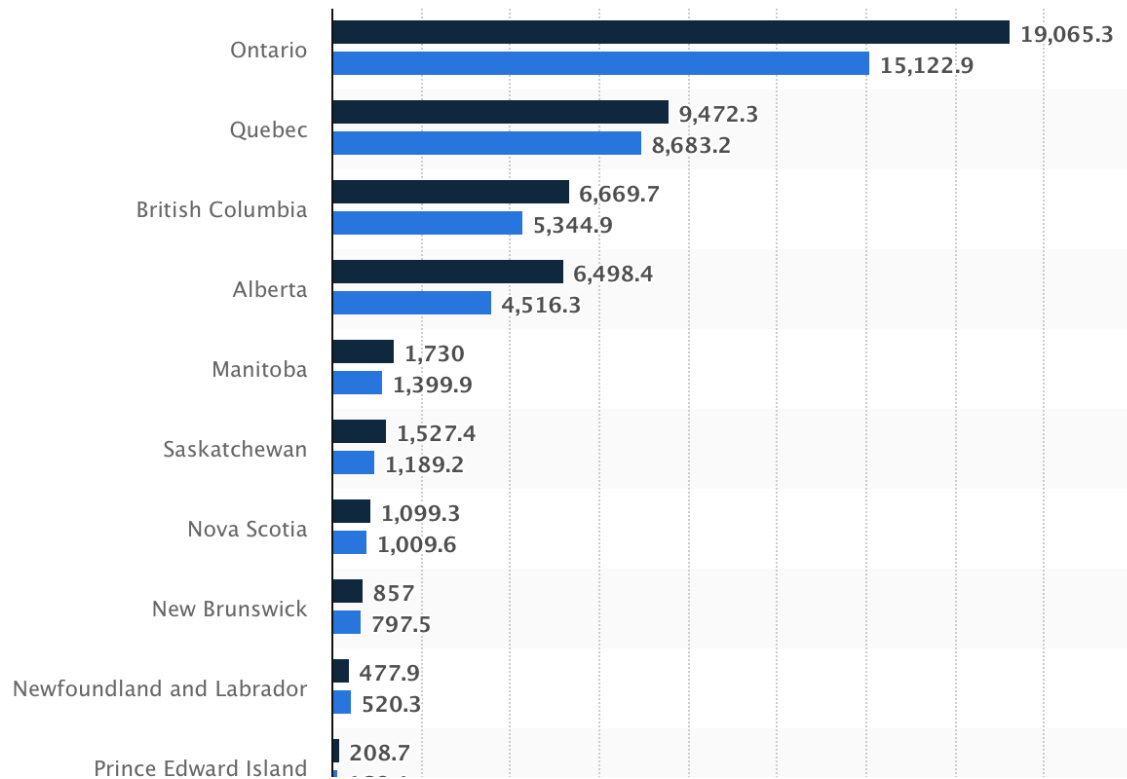


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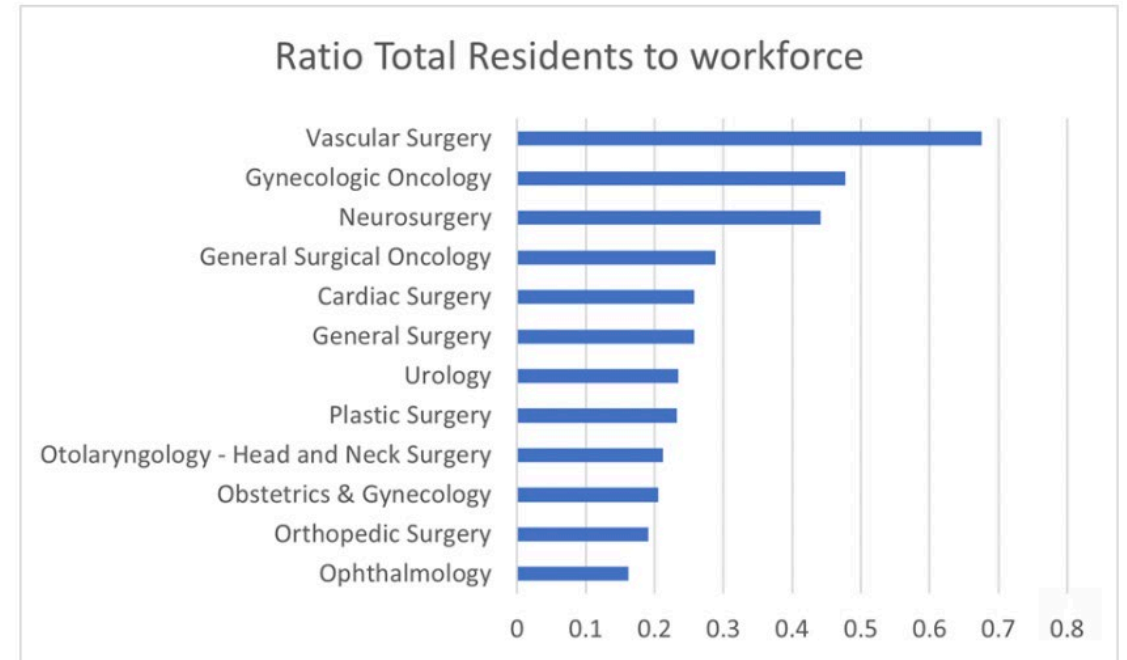
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# Population projection for Canada



# Projected Ophthalmology workforce



Reprinted with permission. Buys Y, Bellan L. Updated inventory and projections for Canada's ophthalmology workforce. *Can J Ophthalmol.* 2022; doi: 10.1016/j.jcjo.2022.06.008.

The ratio of ophthalmologists to population >65 years is projected to drop by 4.9% in a low-growth scenario and 27.7% in a high-growth scenario.

# Challenges for delivering effective eyecare for Canadians

1. Sufficient ophthalmologists to deliver the necessary care  
45 residency positions would be required to meet the projected demand, currently there are 36 positions
2. Access to operating rooms
3. Integrating new innovations into practice  
New treatments for dryAMD on the horizon  
Gene therapy for retinal diseases
4. Need for effective collaborative care networks

**Exhibit 1**

**Interplay of key issues warranting a national vision strategy**

