



CANADIAN ASSOCIATION OF OPTOMETRISTS  
ASSOCIATION CANADIENNE DES OPTOMÉTRISTES

## Seeing Beyond 2020: Empowering the Population through the Early Detection and Treatment of Vision Care Issues

Dr. Michael Nelson, President

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The Canadian Association of Optometrists (CAO) is the national voice of optometry, dedicated to collaboratively advancing the highest standard of primary eye care through the promotion of optimal vision and eye health.

Canada's doctors of optometry (ODs) are deeply committed to improving eye health and vision care services for all Canadians.

In order for Canadians to be as productive as possible, they require quality eye care from birth. Eye health must be a priority, as well as an investment, in financial discussions touching overall health. A national eye health and vision care strategy based on early detection and treatment will improve population health and circumvent costlier treatment and interventions within the broader health care system.

We have an opportunity to take action now to ensure comprehensive eye health and vision care for all Canadians, but more specifically, to respond to those Canadians for whom 75% of their vision issue can be treated or prevented.

## Recommendation

That the Government of Canada commit to a National Eye Health and Vision Care Strategy to promote optimal eye health and prevent vision loss for all Canadians as a key element of our competitiveness strategy.

## Early detection and treatment

In 2017, the Canadian Institute of Health Information (CIHI) reported that Canadians spent \$4.8 billion – 2% of all health care spending in Canada - on vision services.<sup>i</sup> Any degree of progressive vision loss is associated with increased costs in the health system and to the overall economy.<sup>ii</sup> The cost of vision loss extends across the economy:

- Increased rates of injury and physical trauma (e.g. falls) and motor vehicle accidents, particularly for *older adults*.<sup>iii</sup>
- 90% of vision loss costs are *non-eye related medical costs*<sup>iv</sup> (everything from palliative care, to occupational therapy, to accessible public transit services).
- Vision loss is more common in *new immigrants* than the Canadian-born population.<sup>v</sup>
- 34% of Indigenous persons with *diabetes* indicate the disease affected their vision.<sup>vi</sup>
- There are more than 2000 *eye injuries* a day in Canada.<sup>vii</sup>
- People with vision loss are at greater risk of *social isolation* and reduced *community participation*.<sup>viii</sup>

- People with vision loss have more *complex needs and comorbidities* (e.g. diabetes, hypertension, physical and cognitive disabilities<sup>ix</sup>).

**Lower educational attainment and employment rates, higher absenteeism, decreased salary, injury, premature retirement, lower socioeconomic position and poorer health and life chances are all associated with poor visual function.**<sup>x</sup> Optometrists know that these financial consequences can be reduced, because 75% of vision loss is preventable or treatable.<sup>xi</sup>

## Benefits of Primary Eye Care

Research<sup>xii</sup> confirms the cost benefit of comprehensive eye exams in the early detection of vision problems. Research further demonstrates that primary eye care provided by optometrists, as contrasted with family physicians or ophthalmologists, is both cost effective and an efficient use of health resources.<sup>xiii</sup> The right health care professional in the right place at the right time is an economic formula that bears being put to the test.

A National Eye Health and Vision Care Strategy would minimize the economic impact of poor eye health and vision care, while maximizing the health outcomes and economic benefits for all Canadians, notably the young and the aging.

## Children

Improving public education and awareness of the value of comprehensive eye exams, as well as increasing access to exams improves population health outcomes and contributes to school success, educational attainment and ultimately a stronger economy. CAO recommends that infants and toddlers have their first eye exam between the ages of 6 and 9 months, with follow-up exams between the ages of 2 and 5 years, and annual exams for school age children and youth.<sup>xiv</sup> While universal comprehensive eye examinations before entering pre-school are more cost-effective for amblyopia detection than a universal screening program<sup>xv</sup>, the lack of a public health requirement for these examinations creates a barrier to appropriate care. **Early detection, diagnosis and interventions for eye conditions reduce barriers for early childhood learning and increase the chance of students' long term success.**

## Aging Canadians

Canada's aging population continues to grow at an unprecedented rate. After age 40, the number of cases of vision loss doubles every decade, and triples at age 75. One quarter of Canadians over 75 have developed irreversible vision loss.

In 2008, Access Economics conducted the most comprehensive economic analysis of vision loss in Canada to date, estimating the cost for the four most prevalent age-related eye health conditions.<sup>xvi</sup>

- Age-related Macular Degeneration (AMD): \$1.12 billion (includes medical and non-medical costs like equipment and aids)
- Glaucoma: \$549 million
- Cataract surgery: \$136.6 million (and an estimated \$481 million in hospital overhead costs)
- Diabetic retinopathy: \$207.7 million

If we can prevent vision loss and blindness, we should. We know that vision loss has a devastating impact on independent aging: doubling the difficulties of daily living and social dependence, tripling the risk of depression, and quadrupling the risk of hip fractures. On average, admission to nursing homes for seniors with vision loss happens three years earlier. Vision loss also doubles the risk of falls and the mortality rate in seniors.<sup>xvii</sup> **Ongoing treatment and prevention of eye disease is essential to facilitate contributions by aging Canadians to their families, communities, workplaces, and society.**

## Insight into our Recommendation

A National Eye Health and Vision Care Strategy in Canada led by the federal government working collaboratively with health professionals, non-government organizations, industry and individuals would include:

1. Development of a Pan-Canadian Framework for Action promoting effective population eye health and vision care to improve the quality of life and productivity of Canadians.
2. Funding research on the social and economic burden of vision loss; future treatments and cures; vision rehabilitation; and quality of life enhancements for people with vision loss and augmenting data collection to address existing limitations in fully understanding Canada's eye health issues.
3. Development of health policy that supports increased accessibility and utilization of comprehensive eye care in underserved populations (e.g. Indigenous Peoples).
4. Developing policy and funding for collaborative care models that create a culture of eye health as part of overall health and supports interdisciplinary, primary care teams.
5. Undertaking a public awareness campaign to encourage Canadians to think about their eyes and vision health.

## Conclusion

Canada's competitiveness increasingly relies on a workforce empowered to respond to a knowledge-based economy. An investment in a National Strategy that supports eye health and

vision care as a strategic asset to improve Canada's competitiveness will enhance the country's overall economic performance.

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- <sup>iii</sup> Ibid.
- <sup>iv</sup> Op cit.
- <sup>v</sup> Buhrmann, R. et al. (2011). Vision Health: evidence review for newly arriving immigrants and refugees. Appendix for Pottie K., Greenway, C., Feightener, J., et al. Evidence-based clinical guidelines for immigrants and refugees. *Canadian Medical Association Journal*.
- <sup>vi</sup> Statistics Canada. (2012). Aboriginal Peoples Survey.
- <sup>vii</sup> Gordon, K. (2012). The incidence of eye injuries in Canada. *Canadian Journal of Ophthalmology*. 47(4): 351-353.
- <sup>viii</sup> CNIB. (2012). The Cost of Vision Loss in Canada.
- <sup>ix</sup> Ibid.
- <sup>x</sup> Cumberland PM, Rahi JS, for the UK Biobank Eye and Vision Consortium. (2016). Visual Function, Social Position, and Health and Life Chances. The UK Biobank Study. *JAMA Ophthalmol*. 2016;134(9):959–966. doi:10.1001/jamaophthalmol.2016.1778
- <sup>xi</sup> World Health Organization. (2010). Action plan for the prevention of avoidable blindness and visual impairment, 2009-2013. Geneva: WHO. Available from: [http://www.who.int/blindness/ACTION\\_PLAN\\_WHA62-1-English.pdf](http://www.who.int/blindness/ACTION_PLAN_WHA62-1-English.pdf)
- <sup>xii</sup> Ontario Association of Optometrists. 2016. Optimizing Optometry’s Role in Ontario: Better Care, Better Value... Closer to Home. White Paper by the Ontario Association of Optometrists.
- <sup>xiii</sup> Brenda J. Wilson et al. 2018. Screening for impaired vision in community-dwelling adults aged 65 years and older in primary care settings. *CMAJ*. May 14; 190: E588-4. Doi: 10.1503/cmaj.171430/-/DC2.
- <sup>xiv</sup> Canadian Association of Optometrists. (2016). Position Statement: Frequency of Eye Exams. Cited on-line June 21, 2018 at <https://opto.ca/health-library/frequency-of-eye-examinations>.
- <sup>xv</sup> White, A. (2004). *Eye Exams for Children: Their Impact and Cost Effectiveness*. Cambridge, MA: Abt Associates.
- <sup>xvi</sup> Access Economics. (2008). *The Cost of Vision Loss in Canada*. CNIB and the Canadian Ophthalmological Society.
- <sup>xvii</sup> The National Coalition for Vision Health. 2011. *Vision Loss in Canada 2011*. [http://www.cos-sco.ca/wp-content/uploads/2012/09/VisionLossinCanada\\_e.pdf](http://www.cos-sco.ca/wp-content/uploads/2012/09/VisionLossinCanada_e.pdf)