

CHAPTER 4

Eye Care in the Private Sector: Innovation at the Service of Patients

In Canada, it is professionals working essentially in private practices who provide patients with the eye and vision care they require. Although a vision problem is rarely a life-threatening matter, it can nonetheless constitute a serious handicap in one's daily life. According to the latest available data, some 57% of Canadian adults suffer from vision problems. These people must generally wear eyeglasses or contact lenses. Others increasingly opt for corrective laser eye surgery. Whatever the method, in 97% of cases, these people receive the care they need to adequately address their problems.⁹⁹

Contact lenses and LASIK surgery are just a few of the numerous innovations that have transformed the eye care sector in recent decades. There are now a variety of options for treating a great many ocular disorders, some of which were considered incurable not so long ago, like glaucoma, cataracts and diabetic retinopathy.¹⁰⁰ This chapter presents a brief overview of Canada's eye care sector, one of the most dynamic in the health care industry.

The Provision of Eye Care in Canada

In the field of visual health, a majority of primary care is delivered by optometrists, who perform eye examinations and prescribe glasses or contact lenses as needed. Canada had 5,356 active optometrists in 2012.¹⁰¹ The majority of them work in private practice. The rest work in collaboration with ophthalmologists or opticians, practice in visual impairment rehabilitation centres, or teach in a university. Statistics Canada counted 2,077 optometrists' offices in the country in December 2014.¹⁰²

Ophthalmologists are medical specialists in eye and vision care. They are the professionals responsible for diagnosing ocular disorders and seeing to their treat-

ment. They are the ones who conduct surgeries to treat certain diseases like cataracts and glaucoma, and to correct various visual impairments.¹⁰³ Canada-wide, there were 1,208 ophthalmologists in 2013.

Opticians, for their part, are the professionals dedicated to the preparation and the sale of eyeglasses and contact lenses, work that is carried out based on prescriptions prepared by optometrists or ophthalmologists. In certain provinces, they are also authorized to perform eye exams, without being able to write prescriptions, however.¹⁰⁴ In 2012, there were 7,444 opticians in Canada (see Table 4-1).

"Between 1997 and 2012, the number of optometrists grew by 67%, far outpacing population growth."

The optometry sector in Canada has become more and more competitive over the years, with a growing demand for this type of service and an increasing number of active professionals.¹⁰⁵ Between 1997 and 2012, the number of optometrists grew by 67%, far outpacing population growth (see Figure 4-1). This increased competition has given optometrists an incentive to adopt the latest information technology in order to improve the quality of services offered. Over 96% of Canadian optometrists use computers in their practices. Compared to general practitioners working in the public system, a much larger proportion of optometrists use computerized medical files for their patients.¹⁰⁶

Overall, the data from the most recent studies indicate that 40% of Canadians aged 12 and over consult an eye care specialist each year. For people older than 70, this proportion climbs to 60%. These rates seem to be in line with the recommendations of the Canadian Ophthalmology Society in terms of frequency of exams for people not suffering from any known visual problems.¹⁰⁷ As for patients suffering from glaucoma (86%),

99. Anthony V. Perruccio, Elizabeth M. Badley and Graham E. Trope, "A Canadian Population-Based Study of Vision Problems: Assessing the Significance of Socioeconomic Status," *Canadian Journal of Ophthalmology*, Vol. 45, No. 5, 2010, p. 479.

100. Canadian Institute for Health Information, *Exploring the 70/30 Split: How Canada's Health Care System Is Financed*, 2005, p. 84.

101. Canadian Institute for Health Information, *Canada's Health Care Providers: Provincial Profiles—2012*, Canada, March 2014.

102. Statistics Canada, CANSIM Table No. 552-0001: Canadian business patterns, location counts with employees, by employment size and North American Industry Classification System (NAICS), Canada and provinces, December 2014.

103. Royal College of Physicians and Surgeons of Canada, Objectives of Training in the Specialty of Ophthalmology.

104. Competition Bureau, *Self-Regulated Professions — Balancing Competition and Regulation*, December 2007, pp. 82-83.

105. Robert J. Campbell, Wendy V. Hatch and Chaim M. Bell, "Canadian Health Care: A Question of Access," *Archives of Ophthalmology*, Vol. 127, No. 10, October 2009, p. 1384.

106. Paul Stolee et al., "'Eye-T': Information Technology Adoption and Use in Canada's Optometry Practices," *Optometry*, Vol. 82, 2011, pp. 166-174.

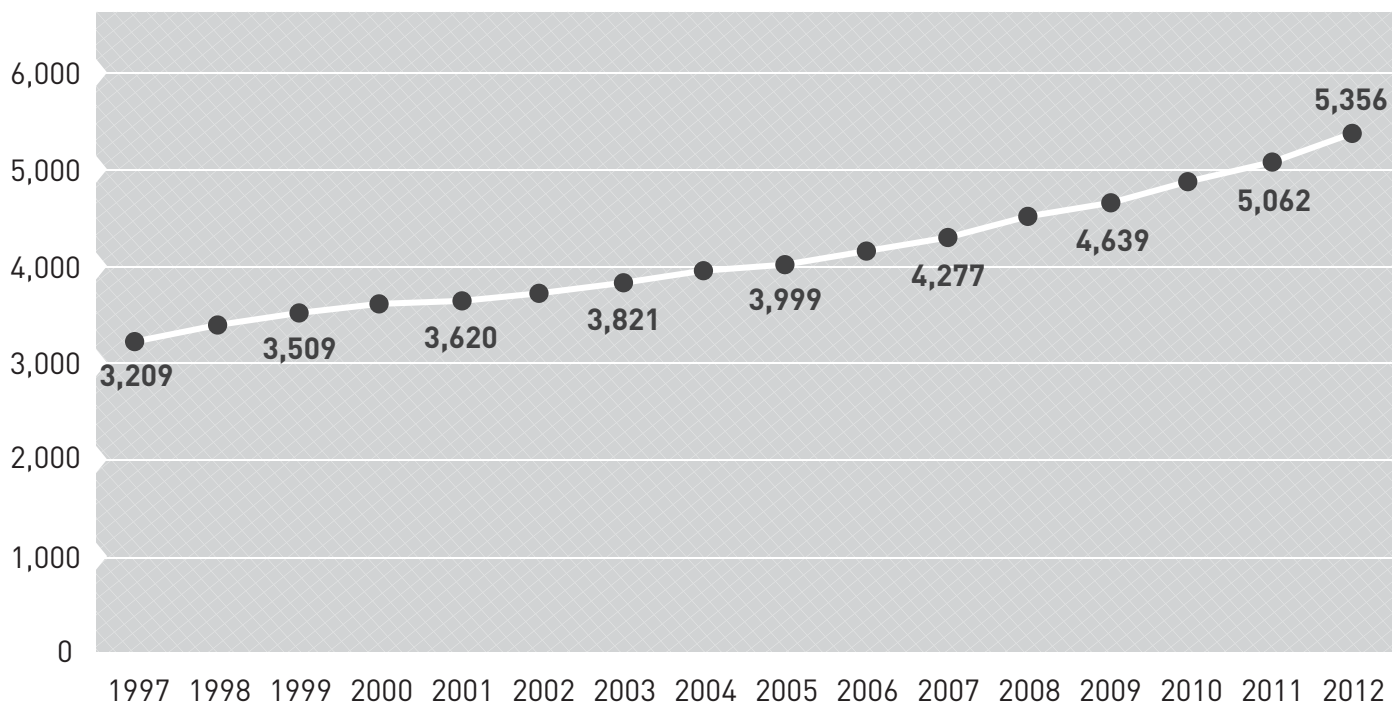
107. Lorne Bellan, "Abandoning Monitoring Eye Care Utilization in Canada: Something Doesn't Smell Right," *Canadian Journal of Ophthalmology*, Vol. 46, No. 2, April 2011, p. 123.

Table 4-1
Eye care professionals in Canada, by province, 2012

PROVINCES	OPHTHALMOLOGISTS*	OPTOMETRISTS	OPTICIANS
British Columbia	200	606	1,049
Alberta	105	617	1,072
Saskatchewan	23	149	265
Manitoba	33	141	330
Ontario	423	2,106	2,500
Quebec	324	1,424	1,642
New Brunswick	26	116	216
Nova Scotia	51	113	247
Prince Edward Island	6	20	32
Newfoundland and Labrador	16	57	91
Territories	1	7	0
Canada	1,208	5,356	7,444

Source: Canadian Institute for Health Information, *Canada's Health Care Providers: Provincial Profiles—2012*, Canada, March 2014; Canadian Medical Association, Ophthalmology Profile.
 *2013

Figure 4-1
Evolution of the number of optometrists in Canada, 1997-2012



Sources: Canadian Institute for Health Information, *Canada's Health Care Providers: Provincial Profiles — 2012*, Canada, March 2014; Canadian Institute for Health Information, *Canada's Health Care Providers, 1997 to 2011 - A Reference Guide, Optometrists*, April 2013.

Table 4-2
Public eye care insurance coverage programs by Canadian province

PUBLIC PROGRAMS	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL
Medically required ocular care	X	X	X	X	X	X	X	X	X	X
Eye exams for youths below the age of 20*	X	X	X	X	X	X	X	X		
Eye exams for people aged 65 and over**	X	X	X	X	X	X		X		
Eye exams and partial assistance for the purchase of eyeglasses for welfare recipients***	X	X	X	X	X	X	X	X	X	X

Sources: Canadian Association of Optometrists, An Overview of Provincial Coverage for Optometric Care in 2014; Chris J. Hong et al., “Does Government Assistance Improve Utilization of Eye Care Services by Low-Income Individuals?” *Canadian Journal of Ophthalmology*, Vol. 49, August 2014, pp. 321-322.

* AB: Annual exam for youths below the age of 19; BC: Annual exam for youths aged 18 and under; MB: Exam every two years for youths aged 18 and under; NB: Annual exam for youths aged 18 and under from low-income households; SK: Annual exam for youths below the age of 18; QC: Exams for youths aged 17 and under; NS: Exam every two years for children below the age of 10.

** BC, QC: Annual exam; AB: Annual exam for people over 65; NS, MB: Exam every two years; SK: Annual exam for recipients of Seniors Income Plan supplements; ON: Annual exam for people over 65.

*** AB, MB, SK, ON, QC: Complete coverage for one exam per year or every two years; BC, NB, NS, PEI: Limited coverage for one exam every two years; NL: Limited coverage for one exam every three years.

cataracts (76%) or diabetes (63%), they are more likely to consult an ocular care professional on an annual basis. For these people, consultation rates are essentially the same across income and education levels.¹⁰⁸

Spending on Eye Care in Canada

In 2012, total spending for eye and vision care amounted to \$3.9 billion, according to figures from the Canadian Institute for Health Information. Over 90% of this amount comes from private sources. Private insurance companies reimbursed one quarter of these expenditures, while patients paid the remaining three quarters directly.¹⁰⁹

Nearly all the provincial governments have programs that cover spending on eye care for certain categories of people, including minors, seniors, welfare recipients

and the visually impaired (see Table 4-2).¹¹⁰ In all cases, the provinces' public plans cover eye exams as well as prescriptions. Fees for exams required to obtain a driver's license or to qualify for a job are not covered. The cost of eyeglasses or contact lenses is also paid by patients except in the case of welfare recipients, who receive partial assistance from the government in each province.¹¹¹

“In 2012, total spending for eye and vision care amounted to \$3.9 billion. Over 90% of this amount comes from private sources.”

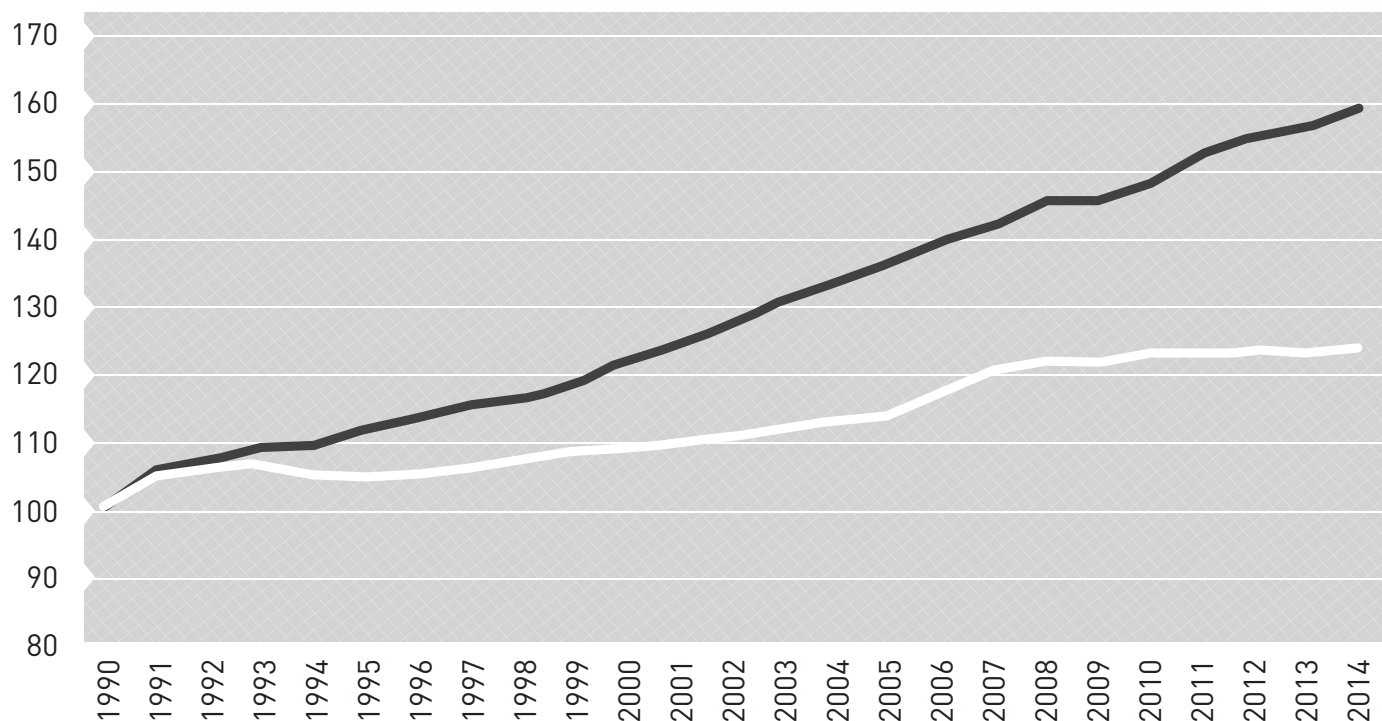
108. Ya-Ping Jin and Graham E. Trope, “Eye Care Utilization in Canada: Disparity in the Publicly Funded Health Care System,” *Canadian Journal of Ophthalmology*, Vol. 46, No. 2, 2011, p. 135.

109. Canadian Institute for Health Information, *National Health Expenditure Trends, 1975 to 2014*, October 2014, pp. 40-136.

110. Only the provincial governments of Newfoundland and Labrador and Prince Edward Island do not cover any optometry services. Canadian Association of Optometrists, An Overview of Provincial Coverage for Optometric Care in 2014.

111. Chris J. Hong et al., “Does Government Assistance Improve Utilization of Eye Care Services by Low-Income Individuals?” *Canadian Journal of Ophthalmology*, Vol. 49, 2014, p. 323.

Figure 4-2
Evolution of the eye care product price index and the consumer price index, annual data, 1990-2014 (1990 = 100)



Source: Statistics Canada, CANSIM Table No. 326-0021: Consumer price index, annual, 1990-2014.

The eye care industry encompasses manufacturers and retailers of lenses, frames and other vision devices. This industry operates in a highly competitive, international market.¹¹² This competitive environment leads to improvements in product quality, and limits price increases for prescription glasses and contact lenses to levels far below the rate of inflation. As can be seen in Figure 4-2, the growth rate of prices for eye care products has been half that of Statistics Canada’s consumer price index since the start of the 1990s.

“Manufacturers and retailers of lenses, frames and other vision devices operate in a highly competitive, international market.”

In Table 4-3, it can be seen that in 2013, Canadian households spent an average of \$184 for eye care products (prescription eyeglasses, contact lenses, etc.) and

\$46 for eye care services (eye exams, surgery, etc.). These amounts vary from one province to another, being generally higher in Quebec and lower in New Brunswick.

Corrective Laser Eye Surgery

Over the past decade, laser surgery has improved the vision of hundreds of thousands of people in Canada. A growing number of clinics now compete to offer this service, and the results are convincing.

Laser eye surgery is an interesting example to analyze since it is generally not covered by insurance in Canada. In the majority of cases, consumers must therefore pay full price to benefit from the procedure. Economic theory teaches us that consumers are much more careful with their money when they have to buy a product or service that is not reimbursed by a third party.¹¹³

112. Health Professions Regulatory Advisory Council, *A Report to the Minister of Health and Long-Term Care on Interprofessional Collaboration among Eye Care Health Professions*, Government of Ontario, March 2010, p. 34.

113. Aviva Aron-Dine, Liran Einav and Amy Finkelstein, “The RAND Health Insurance Experiment, Three Decades Later,” *Journal of Economic Perspectives*, Vol. 27, No. 1, 2013, pp. 197-222.

Table 4-3
Spending by Canadian households for eye care products and services, 2013

PROVINCE	TOTAL SPENDING FOR EYE CARE PRODUCTS AND SERVICES	SPENDING SOLELY FOR EYE CARE SERVICES
British Columbia	\$202	\$40
Alberta	\$280	\$48
Saskatchewan	\$231	\$39
Manitoba	\$184	\$37
Ontario	\$208	\$34
Quebec	\$278	\$69
New Brunswick	\$142	\$24
Nova Scotia	\$178	\$28
Prince Edward Island	\$217	\$66
Newfoundland and Labrador	\$187	\$64
Canada	\$230	\$46

Source: Statistics Canada, CANSIM Table No. 203-0021: Survey of household spending, 2013.

We can see the effect of the demands of consumers and of increased competition on the evolution of prices and service quality. Whereas in the early 2000s, a standard LASIK procedure cost around \$5,000 for both eyes, the price now fluctuates between \$1,000 and \$2,000.¹¹⁴ The technology has greatly evolved these past few years, and personalized LASIK is now more efficient than standard LASIK, as well as being safer for the eye. Taking into account the increase in quality, the price reduction has been substantial, and all the more so considering that since 2000, Canada's consumer price index increased by 31%.¹¹⁵

"Whereas in the early 2000s, a standard LASIK procedure cost around \$5,000 for both eyes, the price now fluctuates between \$1,000 and \$2,000."

Contrary to the situation that prevails in the public health care system, prices have fallen over the years despite the adoption of ever more advanced technology. The risks related to postoperative complications have also fallen substantially with technological improve-

ments and increasing surgical experience.¹¹⁶ According to an exhaustive study, the satisfaction rate of patients who have undergone LASIK surgery is over 95%.¹¹⁷

Conclusion

Although certain analysts would like to see more government involvement in the field of eye care,¹¹⁸ available evidence shows that this is a competitive sector that is very accessible to patients.

In those areas of health care where entrepreneurial initiatives are encouraged, we can see that the market is dynamic, innovations abound and the quality of services and treatments is constantly improving. Eye and vision care, which is financed and supplied almost entirely by the private sector in Canada, provides a striking example of this.

114. Heather Kent, "Huge Declines in Price as Competition Heats Up in Vancouver's Booming Laser-Surgery Market," *Canadian Medical Association Journal*, Vol. 161, No. 7, October 1999, pp. 857-858; Nathalie Vallerand, "La force d'une vision," *Les Affaires*, February 26, 2011.

115. Statistics Canada, CANSIM Table No. 326-0021: Consumer Price Index, annual, 2001-2011.

116. Tohru Sakimoto, Mark I. Rosenblatt and Dimitri T. Azar, "Laser Eye Surgery for Refractive Errors," *The Lancet*, Vol. 367, April 2006, pp. 1432-1447.

117. Kerry D. Solomon et al., "LASIK World Literature Review: Quality of Life and Patient Satisfaction," *Ophthalmology*, Vol. 116, No. 4, April 2009, pp. 691-701.

118. Chris J. Hong et al., *op. cit.*, footnote 111, p. 324.