COST OF VISION LOSS AND BLINDNESS IN CANADA SUMMIT
May 26, 2021
Full English Transcript

Speaker Key:

MI Morgan Ineson

MB Michael Baillargeon

KG Dr Keith Gordon

MN Dr Michael Nelson

CM Dr Colin Mann

LG Louise Gillis

DE Doug Earle

JT Jim Tokos

00:00:32

MI Good afternoon, everyone. We're going to be starting in just one moment. I'm going to turn it over to Michael Baillargeon, to some opening remarks.

MB Good afternoon, ladies and gentlemen. And welcome to the summit, where this afternoon, we will discuss the most recent report on The Cost of Vision Loss and Blindness in Canada. Special thanks to the summit's presenting sponsor, Bell Canada, and to Katrina Patscik and her team for their ongoing commitment to those living with vision loss. Thanks again, Bell Canada. Today's summit will also be available in French.

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 To access the French translation, you can click the link we have put in the chat. Click attend in the browser. That opens it up and you will have the live French stream available. You can click the audio icon at the top of the page to have it read aloud. We will also be posting English and French transcripts after the event. Canadian Council of the Blind would like to thank our partner at Fighting Blindness Canada, their leadership, Tara James and President Doug Earle and his outstanding team members.

 We would also like to express our gratitude to our key partners at the Canadian Association of Optometrists and the Canadian Ophthalmological Society, to François Couillard and Elisabeth Fowler respectfully. The Cost of Vision Loss and Blindness report is consequential and will play a significant role in the future of vision loss. The Canadian Council of the Blind and our partners would like to express their sincere appreciation to our funders who provided unrestricted grants.

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 Thank you. Thank you, Allergan and AbbVie company, Alcon, agtc, Bausch + Lomb, Bayer, Bell, the Canadian Association of Optometrists, the Canadian Council of the Blind, the Canadian Ophthalmological Society, Fighting Blindness Canada, Glaukos, Janssen, Johnson & Johnson, MeiraGTx, Novartis and Roche. Without your assistance, this report would not have been possible. Thank you.

 Before I move on with The Cost of Vision Loss and Blindness report, I would like to take a moment to discuss the scope of this study. The report was spearheaded by our principal investigator, Dr Gordon, who worked closely with Deloitte Access Economics to collect and analyse data for the report. DAE is Australia and world preeminent health economics advisory practice and a history of rigorous and outstanding work in areas spanning disease prevalence, wellbeing analysis and the economics of disability.

 The summary report was written by Principal Investigator Dr Keith Gordon, assisted by investigators Dr Larissa Moniz and Dr Chad Andrews and was based on key findings of the Deloitte report. The Canadian Council of the Blind, Fighting Blindness Canada, the Canadian Association of Optometrists and the Canadian Ophthalmological Society actively collaborated in the direction of the project and the assessment of all information utilised in this study.

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 Their generous input has shown that it can be achieved through collaboration and knowledge-sharing among key stakeholders in vision health. Over 45 key informants, including but not limited to the field of ophthalmology, optometry, epidemiology, health economics, statistics, assistive technology and vision rehabilitation, provided input into this report. I would like to specifically [unclear] Dr Yaping Jin from the University of Toronto, Dr Ellen Freeman from the University of Ottawa and Dr Walter Wittich from the University of Montreal.

 Their expertise has been an enormous benefit to this report. The information gathered for the report is referenced in 134 endnotes citing leading research and findings from North America, the United Kingdom, Australia, South Africa and other regions. This report not only represents a new research effort at home here in Canada, but work that was performed on the shoulders of innovative and outstanding research from across the globe.

 The report spans six comprehensive sections. These include an overview of epidemiology of vision loss, a breakdown of costs associated with different aspects of vision loss and an analysis of how individual wellbeing is impacted by vision loss. Taking together each component of the study paints a detailed picture of how widespread vision loss is in Canada, as well as just how personally and economically devastating it can be.

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 The report includes a sensitive analysis which was used to validate the numbers presented in the report. Finally, the report speaks to the national costs associated with vision loss. But perhaps more importantly, it emphasises the individual personal costs that are disproportionately carried by those with lived experience in visual impairment. While this is an economic study, we never failed to lose sight of the vision loss people behind numbers.

 Moving forward, as we discuss The Cost of Vision Loss and Blindness in Canada report, I would like to take this opportunity to introduce today's esteemed panel. Dr Michael Nelson, president of the Canadian Association of Optometrists, Dr Colin Mann, president of the Canadian Ophthalmological Society, Louise Gillis, national president of the Canadian Council of the Blind and Doug Earle, president and chief executive officer of Fighting Blindness Canada.

 I would like to take this opportunity to introduce today's moderator, Dr Keith Gordon. Dr Keith Gordon is a senior research officer of the Canadian Council of the Blind and is the principal investigator of The Cost of Vision Loss and Blindness in Canada 2019 study. He was the co-principal investigator in the 2009 study on the cost of vision loss in Canada conducted by the CNIB and the Canadian Ophthalmological Society.

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 Dr Gordon is past president, research, of CNIB and past research director of Blind and Low Vision New Zealand. He is also a board member of BALANCE for Blind Adults and chair of the board of the international organisation, Retina Action. He is an adjunct professor in the Department of Ophthalmology and Vision Science at the University of Toronto and an honorary teaching fellow in the School of Optometry and Vision Science at the University of Auckland in Auckland, New Zealand. Ladies and gentlemen, I'd like to introduce Dr Keith Gordon.

KG Thank you very much, Michael. As Michael has already mentioned, the CCB engaged Deloitte Access Economics in December of 2020 to provide us with a contemporary estimate of the annual social and economic cost of vision loss and blindness in Canada. Our partners in this initiative, as Michael has also mentioned, were Fighting Blindness Canada, the Canadian Association of Optometrists and the Canadian Ophthalmological Society.

 You'll be hearing from the presidents of all four organisations as soon as you can shut me up. Moving along, we can have the next slide, please, Morgan.

MI Just one moment, Keith. Sorry, we're having a slight technical problem. Just give me one moment.

KG Next slide, please. To start off, I'd like to just give a little bit of the background, a little bit of what Michael has already mentioned. The most recent data on the prevalence and cost of vision loss was conducted in 2009 using 2007 data. If you want to have any effect of planning for vision health, you need to be working off current data. For a number of years, we've been getting a lot of requests for updating information.

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 And I'm sure that everybody in the vision health community has had similar experiences. And we decided it was time to move on it. And thank goodness, we were able to put together this consortium of partners that we've already talked about and we moved on. Next slide, please. To start with, I'd like to define what we mean by vision loss. This isn't as simple as it seems. But we decided at the beginning that we would focus on best-corrected visual acuity.

 There’ve been a number of studies done using other definitions, in particular, presenting visual acuity. But we felt that best-corrected visual acuity gave a much better reflection of what people with vision loss are experiencing. We broke the categories of vision loss down into three. First of all, we had people who had mild vision loss, with people who had a best-corrected visual acuity worse than 20/40, but better than or equal to 20/60.

 People with moderate vision loss had a best-corrected visual acuity worse than 20/60, up to 20/200. And people who were blind or had severe vision loss had a best-corrected visual acuity of 20/200 or worse. Mild is 20/40 to 20/60. Moderate is 20/60 to 20/200. And severe vision loss or blindness is worse than 20/200. I might mention that's in the better seeing eye in all cases.

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 Next slide, please. When we were confronting the evidence to look at the prevalence of vision loss across the complete age spectrum, we found, of course, that there were big gaps in the availability of Canadian data. I might say at the outset that Canada has never conducted a complete population health study in the area of vision. We didn't really have a tremendous amount of data to pull on. But where available, we were able to use Canadian data.

 And where not, we accessed really good studies from the United States. In the under five-year age group, we found a very good study conducted in the United States on vision loss in preschool children, and we used that. From the age of five to 19 years old, we were able to access the Canadian Health Measures Survey from Statistics Canada. We had Canadian data in that age pocket. From 20 to 44 years of age is another gap.

 And to fill in that gap, we used the NHANES study, the National Health and Nutrition Examination Survey, which is a massive study conducted in the United States. Then moving on into the older category where most vision loss is, from the 45- to 84-year age group, we were able to access the Canadian longitudinal study on ageing, which had vision data that was useful to us.

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 And when we got over the age of 85 years, we used the International Association for the Prevention of Blindness, IAPB, data and applied that to the Canadian longitudinal study on ageing to fill in the gap on the far end of the spectrum. It’s a bit of a patchwork quilt, but it is the best data that one can get for Canada at this stage until such time as somebody finds a major population health study. Next slide, please.

 What did we find? We've estimated that there were 1.2 million Canadians living with vision loss. This represents about 3.2% of the total population. Of the 1.2 million, about 50,000 are blind. That's only about 4% of people with vision loss. 417,000 had moderate vision loss and almost three quarters of a million, 738,000 have mild vision loss, using the definitions that I provided earlier. 54%, just over half of the population with vision loss, are 65 years of age or over.

 And about one in five people over the age of 85 have vision loss, 20.9% of people. That means that if you know five people over the age of 85, the chances are you know somebody who's experiencing issues associated with vision loss. Very often, we tend to think of these numbers as numbers and not as people. But when you look at statistics of this sort, I think it's important to think of people that you know who have vision loss.

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 Next slide, please. When we look at the 1.2 million people, we broke it down by major cause, the diseases that were the reason for people losing their vision. The largest contributor to vision loss was cataracts, where there were 442,000 people who had vision loss due to cataracts. That's about 37% of all people with vision loss. There were 179,000 people with macular degeneration, where macular degeneration was the cause of their vision loss. That's 15% of the total.

 Glaucoma was 129,000 people. 11% of the total. And diabetic retinopathy, 116,000 or 9% of the total. There's a whole other category that we just lumped everybody else together, mainly because it's hard to get that data because very often, the amounts are too small. But the other category consisted of all other diseases that cause vision loss. And foremost amongst that is corneal diseases and trauma.

 But there are a number of smaller conditions such as inherited retinal diseases and dry eye leading to vision loss. Next slide, please. This slide consists of, it's a bar chart that has the projections of the number of people with vision loss by province. To get this, we took the prevalence percentage on the national basis and applied it against the demographics of each province and came up with a projection for that province.

 Why is this important? Because in Canada, healthcare is provided by the provinces or territories. And every time you go and talk to a government in the province, they want to know how many people with vision loss there are in the province. The slide is available in the summary document that Michael mentioned and in the full study. And both are available on the website at stopvisionloss.ca. And I might mention that this and all the charts and the whole document, in fact, is accessible.

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 Next slide, please. We have 1.2 million people with vision loss today. What is the future going to look like if we just continue doing what we're currently doing? It doesn't mean that we're not doing anything. But if we keep doing what we're doing, there's going to be a continual increase. The numbers we projected is that by the year 2050, 30 years from now, there will be two million people with vision loss in Canada.

 Next slide, please. We've talked about the breakdown of the people with vision loss by the disease that caused it. But sitting in the wings are a large number of people with major eye diseases that could cause them to lose vision. Currently, they're doing okay and not don’t [?] have vision. But they have been diagnosed with a condition. And if they are left untreated, they're likely to continue to lose vision with time.

 This is the target group that one has to get to to try and control further vision loss. Using a number of large international studies and a number of meta-analyses, we were able to come up with projections of the number of people with the four major eye diseases in Canada currently. And we estimate that there are two and a half million people living with macular degeneration, 3.7 million living with cataracts, one million living with diabetic retinopathy and about three quarters of a million, 728,000, living with glaucoma.

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 These numbers are large and these are the people that need to be watched very carefully in the future. Next slide, please. Moving on from prevalence to cost, the total cost of vision loss in Canada was estimated in 2019 as being almost 33 billion, 32.9 billion. Then it consists of a total financial cost of 15.6 billion and a lost wellbeing cost of 17.4 billion. Lost wellbeing is not a financial cost. You can't spend it in a sense.

 But it is a metric that is used by health economists to assess the impact of a disease or condition. And it's really important when you look at the overall cost of vision loss to incorporate the cost of lost wellbeing into the total package. The total financial cost of 15.6 billion was estimated to be about $10,700 per person with vision loss and about $415 per Canadian. For the first time, I believe, ever, we looked at the direct health system costs of falls associated with vision loss.

 We know that a lot of people fall just due to the fact that they can’t see very well. And the costs associated with that are generally incorporated elsewhere in any analysis, maybe in the hospital costs or in the cost of emergency department or in an assessment of the overall cost of falls. But it’s never been broken out in terms of the cost of vision loss. We were able to do that and we estimated the cost of falls due to vision loss was about $105 million in 2019.

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 Next slide, please. If you break out the financial costs of vision loss, the $15.6 billion, into three packages, you get the direct healthcare system costs. And I'll talk about how that breaks down in a minute. Productivity losses, which were $4.3 billion, these are the costs associated with a reduction in participation in the workforce. We know that people with vision loss are not employed to the same extent as people with other disabilities.

 And in turn, they're employed to a much lower extent than people who are fully-sighted. There is a cost associated with that. People don't earn. They don't pay taxes. And all of that assessment, we've put into this productivity loss column. Then there's a third bucket. The third bucket is called other financial costs. And in that bucket, we have the cost of low vision rehabilitation, the cost of adaptive technology.

 People with vision loss need special technology to enable them to access their computers and a lot of other things that they use on a day-to-day basis. And there's also the cost of adaptation of housing. And the largest chunk of this other financial cost is a cost called efficiency losses. And the efficiency losses are costs associated with the transfer of resources within the economy. And transfer of resources can be, for example, additional government payments to people with vision loss.

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 If the government makes a payment to somebody, they've got to replace that money by raising taxation. And the efficiency costs or efficiency losses are costs associated with raising additional taxation to offset the transfer of resources within the economy. It's a complicated economic factor, but it amounts to over a billion dollars. And it's important to take that into account. Next slide, please. If we look at the direct healthcare system costs on their own, they amount to about $9.5 billion.

 Vision care accounts for the largest chunk of this. It’s $5.5 billion or 57% of the total direct health costs. Vision care is the cost of visits to optometrists, opticians and the cost of eyeglasses and contact lenses. Outpatient care amounts to $1.9 billion or 20% of the total direct health costs. Outpatient care is the cost of visits to ophthalmologists and the cost of ophthalmic surgery. Pharmaceuticals accounted for $1.4 billion or 14% of the direct healthcare system costs.

 This number is up substantially over the last ten years due to the advent of new medications called anti-VEGF drugs, which are used in the treatment of macular degeneration and diabetic retinopathy. That is, on the one hand, you have an increased cost. But on the other hand, you also have fewer people with severe vision loss as a result of the use of this. And that it more than offsets the increase in costs and that is accounted for elsewhere.

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 There is a category called other costs, which is largely the cost of capital and administration in the hospitals and clinics. And that's about half a billion dollars. Hospital care is about $152 million. The largest piece of that, I’ve already mentioned, is the cost of falls, which is about $105 million. And the rest is the cost of ophthalmic procedures conducted within the hospital. That's trauma or ophthalmic surgeries that are required, where one is required to have the surgery done within the hospital.

 And at the bottom of this list, I've pulled out the smallest amount. And that is the cost of vision research. And I'm sure Doug is going to be talking about this a little bit later. Doug Earle, president of Fighting Blindness Canada. Unfortunately, we were only able to come up with a measly $21 million that is being spent on vision research in Canada. And this was looking at vision research in all areas from psychology, through to genetics, stem cell research, anything you can think of, we were only spending $21 million in Canada in 2019.

 Next slide, please. What can we look for in the future? First of all, based on the trends in population growth and ageing, continuing doing what we're doing, the cost of vision loss in Canada will grow from about $33 billion in 2019, to $56 billion, in 2019 dollars, in 2050. Almost double. But we have to do something to stem this graph. To decrease the prevalence and cost, we need new treatments, which means we need new research.

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 We need more access to existing treatments. And there's a long, long list that could support this. Prevention is essential. We need prevention programmes. We need everybody to have regular comprehensive eye examinations funded by governments. And again, there's a long list that is essential to make these things happen. Secondly, assuming that we will never not have people with vision loss, it's essential that we create a society whereby we will improve the quality of life for those people living with vision loss.

 We need to create an accessible society and one that has an overarching environment of inclusion. People with vision loss have the ability to fully participate in society if the society is adapted to the needs of us all. And I'm not saying just to the needs of people with vision loss, but to the needs of all of us. And finally, this all needs to be packaged in a far-reaching, coordinated plan for vision health in Canada.

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 The federal government has promised, on at least three occasions, that they would develop and implement a national plan for vision health in Canada. To date, we don't have such a plan. It's essential that all of this be done in a rational manner. It's not only desirable we have such a plan, it's rational, it's ethical, but it's also long overdue. Next slide, please. That’s it for my presentation on the results. If you want to learn more, we encourage you to get the report.

 The full report and the summary report are available at www.stopvisionloss.ca. And at that website, you can also sign a letter of encouragement, shall we say, to politicians across the country to encourage the creation of a national vision health plan for Canada. Thank you very much. And with that, I would like to introduce you to the president of the Canadian Association of Optometrists, Dr Michael Nelson. Michael, take it away.

MN Good afternoon, everyone. And thank you so much, Keith, for that introduction. And before I share my observations about The Cost of Vision Loss report and specifically what that means for optometry, I wanted to extend the thanks from the Canadian Association of Optometrists to the Canadian Council of the Blind for commissioning this report by Deloitte Access Economics. And for inviting CAO to contribute to it and as well to be part of today's proceedings.

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 This [inaudible] provides all of the [unclear] working to reduce the burden of vision cost for Canadians with really, really valuable information that can help us develop a population-based policy. And [inaudible] of optometry in Canada, the Canadian Association of Optometrists or otherwise known as the CAO, we provide leadership and support to approximately about 5,400 optometrist members who serve as the primary eye care providers for Canadians coast to coast, all across of Canada.

 And our interest in the types of facts and figures that are included in the cost of the vision loss report isn't new. And we've been involved in increasing awareness about eye health and vision care for many, many years. And the fact that we're speaking about this crisis now reflects our concern that not enough is being done to support the delivery of eye care in Canada. And what this is doing, this is translating into needless spending of billions of dollars.

 As the report indicates, there's about 1.2 million Canadians that live with some type of vision loss. And there's another further 5.6 million Canadians who are living with some type of eye disease that puts them at risk for some type of vision loss. These are big numbers. 1.2 million Canadians have some vision loss. 5.6 million are at risk for vision loss. And all of this, even despite the fact that 75% of these is vision loss, is either reversible or preventable or it's treatable if…

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MI Sorry, Dr Nelson, we just lost your sound. I don't know if you can still hear me, but I can't hear you anymore. No, you're on mute. Maybe you could try…

MN How about now?

MI There we go.

MN How’s that?

MI Loud and clear.

MN Where’d you lose me?

MI Just when I came in. [Overtalking] volume then it cut out.

MN Thanks for the volume. Basically, all of these Canadians that have vision impairments. And the important thing is that despite the fact that 75% of this vision loss is either reversible or preventable or it's treatable if it's diagnosed early. The finding of this Deloitte report, it reinforces some findings of the World Health Organisation's first report on vision, which was released in 2019. This is significant because the World Health Organisation even feels vision is important.

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 And that report, it spoke specifically to the global myopia epidemic, which is finding that about 50% of the world population by 2050 is going to be myopic. And that's a significant finding, that over half of the world's population is going to be myopic by 2050. Because we know that people with high myopia are at much more risk for developing disorders in eye disease like glaucoma and retinal detachments and cataracts. And that's really a cause for concern.

 One thing that we recognise is that healthcare delivery is primarily provincial. But when you have a big healthcare issue like this that has a significant impact on the Canadian economy, that merits the attention of the federal government as well. If we increase the spending and investments on programmes that can support Canadians with vision loss, that may help lead to reductions in personal financial costs.

 It's going to help reduce healthcare costs. It's going to help reduce productivity losses and other costs in informal care. In addition to demonstrating this high economic cost of vision loss in Canada, this Deloitte report, it's providing supportive evidence for CAO’s other findings that coverage falls short in delivering the best quality of care for Canadians. This is care that could reduce both the incidence of vision loss and its human and economic impact.

 Public healthcare coverage for vision care really varies all across the country. While most provinces have some type of basic vision care coverage for children and seniors, there are some provinces like Newfoundland where there's absolutely no coverage at all. And in some provinces, there is no public coverage for adults under 65. Private insurance could be a good alternative, but they lack picking up the slack in this as well.

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 Because in the end, about 74% of the vision care costs are being paid out of pocket by Canadians. And these costs can impact the treatment and care. We think that there's a simpler solution to try to help solve this problem. And that is comprehensive eye care and comprehensive eye exam. A comprehensive eye exam is the least invasive physical exam that a person can ever have. And yet, it's going to provide you with lots and lots of information.

 The eye exam covers everything from a patient’s history, to measuring the movements of the eye and the eye coordination, sharpness of vision and peripheral vision. It will also include assessing someone's ability to adjust their focus to see colour and depth perception normally. And while many comprehensive eye exams may result in some needing prescription for glasses and contact lenses, it could also end with a diagnosis of something more serious like cataracts, glaucoma, macular degeneration.

 Serious eye conditions that don't have obvious symptoms at the onset, but are critical in terms of treatment to respond early. The comprehensive eye exam can also identify other health conditions. It includes warning signs of conditions like hypertension, cholesterol, vascular disease, thyroid disease, brain tumours and diabetes. The CAO recommends that comprehensive eye exam start in babies. And we recommend that annual eye exams occur in children up to the age of 18, starting as young as six months.

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 And in adults, we recommend an exam at least every two years. And in the senior years, again, annually. And of course, this is just a guideline. And for individuals living with eye disease, more frequent exams might be required. But one thing we know is that when the cost of comprehensive eye exams are covered, it can lead to early detection and early diagnosis. And with some individuals receiving research-delivered treatments that can help stabilise their vision and reduce the vision loss that might result.

 The report on vision that we're studying and looking at today, it provides us with this data that confirms that we are really at a tipping point in terms of ensuring the optimal eye health and vision care for Canadians. And the Canadian Association of Optometrists believes that when we're armed with this information, all of those involved in the delivery of eye health and vision care, including all the organisations that are here today and the federal government together, we can work collaboratively on a few things that will help meet this goal.

 And I've got five things. We've got five points that we think would help move the needle on this. Number one, as Keith had mentioned earlier, that developing a national vision care strategy, supported by vision desk at the federal government. This is a national strategy that would ensure that vision is a priority to Canadians. And we think that would move the needle. Secondly, we think increase in research to eye health research funding.

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 Number three, we ensure that there's a reliable source of strategic supplies of medications and eye medications. And number four, enhancing access to indigenous populations and other priority populations to make sure they have proper eye care to those groups. And number five, making sure that there's funding to support eye health awareness programmes and public awareness programmes to the public so they know the importance of things like comprehensive eye exams.

 We're all here today because we believe that this crisis is not only as real, but that we have a role in responding to it. And the Canadian Association of Optometrists, we're happy to try to be a part of that solution to try to reduce the burden of vision care to all Canadians. And we're really happy to be part of this report. Thank you.

KG Thank you very much, Dr Nelson. And for the ophthalmologist’s perspective, I'll pass it over to Dr Colin Mann, who’s president of the Canadian Ophthalmological Society. Thank you, Colin.

CM Thank you, Keith. And thank you very much for inviting me. And I would also extend my thanks and congratulations to CCB for commissioning the report and for involving us. Thank you. My name is Dr Colin Mann. I'm a comprehensive ophthalmologist practising in Bridgewater, Nova Scotia, and currently the president of the Canadian Ophthalmological Society or the COS. As you may know, the COS represents Canada's medical eye doctors and surgeons.

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 It is the national authority on eye and vision care in Canada. We're committed to ensuring the provision of optimal medical and surgical eye care for all Canadians by promoting excellence in ophthalmology and by providing services to support our members in practice. Our membership includes over 900 ophthalmologists and 200 ophthalmology residents or trainees. We work collaboratively with government, other national and international specialty societies…

 Our academic community is represented by ACUPO. Our provincial partners and affiliates and other eye care professionals and patient groups to advocate for health policy in Canada in the area of eye and vision health. COS is an accredited award-winning provider of continuing professional development through the Royal College of Physicians and Surgeons of Canada and is an affiliate of the Canadian Medical Association.

 When I was thinking about what I wanted to say here today to you, I happened to receive a call from a reporter for the National Post. The reporter was looking for information about surgical backlogs. And it struck me just how many people are suffering from vision health issues, have been disproportionately negatively impacted during the pandemic. And how much longer it will take for them to realise normalcy again.

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 As we've heard, nearly one in six Canadians are living with one of the four major eye diseases and are at serious risk of losing their vision. In the last decade or so, the proportion of people over 60 has increased from about one in five to one in four in our population. This is the population that is disproportionately represented at risk for vision loss as well as we've heard, but also those who feel most vulnerable during the pandemic.

 We know that vision loss can be treated or even prevented in 75% of cases. But when we can't see or treat our patients either due to lockdown, surgical postponements or their own fear of leaving the safe confines of their own home, we lose those chances to maintain the gift of sight for those Canadians. Prior to COVID, a recent Conference Board of Canada report on the value of ophthalmology estimated that treating and preventing vision loss was projected to save 1.6 billion in direct healthcare costs in 2020.

 A number that's expected to reach at least 4 billion by 2040. The same report indicates that a return on investment of ophthalmic interventions and surgeries is approximately 300%. That is, for every dollar spent on ophthalmic interventions, $3 in direct and indirect savings to society and the economy is realised. This, of course, is crucial information, especially for our government partners.

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 And that, of course, pales in comparison to the most important factor, the benefits for patients of being able to see their family on Zoom calls, to be able to take a walk in the park and enjoy the sights or being able to determine simply whether people around you are wearing masks and distancing appropriately. This independence is priceless. One of the things most concerning at the moment for Canadian ophthalmologists is, of course, surgical backlog.

 In most jurisdictions in Canada, ophthalmic interventions and surgery are restricted or were restricted or, in fact, limited only to emerging ones during several months of the first wave of the pandemic. In response, the COS produced a novel surgical prioritisation tool to assist Canadian ophthalmologists in advocating for access to the operating room for their patients who needed it. This tool allowed an objective scoring system to be applied on equal footing with other surgical services looking for the limited operating room access for the patients.

 The cohort of patients who had surgery postponed during the first wave was the obvious part of the backlog. But of course, there's other cohorts of patients who also met reduced access to eye care pathways because of the challenges produced by the pandemic. Beyond that, there were also the group of patients who live with chronic eye diseases, such as glaucoma and macular degeneration, and whose appointments for their regular monitoring of those diseases have been delayed.

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 These groups have contributed to surgical backlog that is quite severe in some parts of the country. I would like to congratulate and thank all the members of the eye care team who persevered through the restrictions and are doing so still and worked in innovative ways so they can provide care to their patients during the challenging time. The ultimate resolution of the backlog will require a number of components.

 And the key is that this is also the key to future eye care and in addressing the vision loss and cost of vision loss identified in this document. There'll have to be a cooperative approach between ophthalmology, other members of the eye care team, other physicians and other healthcare workers. It will require identification and prioritisation of access to surgical resources. It will require financial resources, both temporarily and in the long term.

 It will require a commitment to the human resources required, not just ophthalmologists, but other eye care professionals, OR nurses, clinic personnel and so on. It’ll require attention be paid to the challenges presented for trainees in ophthalmology and optometry by the pandemic. They are our future practitioners. And it will require innovation. Really, innovation and access are the ultimate long-term solutions both to this backlog and indeed the long-term vision health of Canadians.

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 Over the last half century, we've seen amazing leaps in eye care innovation from the first glaucoma implant developed in 1960, to the recent protein gene therapy discoveries in patient trials. It's becoming easier, not only to restore sight, but to prevent the loss of sight in the first place. To deal with increasing demand for ophthalmic procedures, approval of new techniques and technologies must keep up.

 Simply put, access to the best technology and the most advanced techniques is what Canadian eye care patients deserve. Ophthalmology is constantly evolving. Each year, new and more effective medications and surgical technologies are being developed and brought to market. These innovations bring with them an ever-increasing potential to improve vision and can enhance services to patients over time.

 However, having many provincial jurisdictions leads to a complicated pathway for technology adoption and diffusion. Across the country, the full potential of innovation may not be realised due to challenges in integrating new technologies into clinical practice. Integrating new technologies that can improve patient care is both a regulatory and a resource allocation issue. Due to interprovincial differences in resources and regulations, there isn't a uniform way to implement innovative technologies into Canadian practices.

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 The introduction of new technologies and devices is often limited to academic health centres for prolonged periods of time. In addition, the burden of cost at times is transferred to the patient. This can lead to inequities, for example, geographically and financially, in access to clinical innovations and emerging treatment options. By holding back innovation and its integration into clinical practice, Canada risks falling behind and missing out on improved patient outcomes and healthcare efficiencies.

 We're calling on Health Canada to improve collaboration with ophthalmology, to implement innovations to benefit the delivery of eye care in Canada. The development of a national vision strategy and the establishment of a federal vision health desk would facilitate these efficiencies. But just as important as innovations are, access to care is critical. The capacity of ophthalmologists to provide clinical services is influenced by the systems of care delivery that are in place.

 Delivery of care is not equivalent across Canada. I'm proud to say the province of Nova Scotia was the first Canadian province to establish a collaborative care model between ophthalmologists and optometrists in some eye care. Planning and coordination between providers is needed in the delivery of preventive vision care services. A collaborative care network means involving all the relevant stakeholders.

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 It also means improving processes with industry innovators and regulators to effectively deliver the best possible care in Canada. As we continue to grapple with how to provide care among provinces, we're also exploring how we bridge the rural-urban divide. The COS is partnering with the Canadian Association of Optometry to better understand access and drive towards solutions. While in the early stages, we plan to tackle this issue together so patients can benefit.

 As a part of this partnership, we’ll develop a common definition of access and its component parts. We’ll be able to measure access in different regions of the country and within provinces. And we will develop innovative solutions and policy proposals together to improve access. I'm excited about what we can do together. One of the areas where access and innovation come together is ocular telemedicine.

 The pandemic has accelerated the pace of development in this area. For example, the Canadian Glaucoma Society, a subspecialty society of the COS, recently published a paper endorsed by the COS and ACUPO, which puts forward an evidence-informed review of teleglaucoma models of care in Canada. Ophthalmologists across Canada are exploring ways to increase access in times of restriction by utilising innovative teleophthalmology options.

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 I have no doubt that some of these innovations will provide to be in the best interest of patients after the pandemic restrictions are lifted and will be incorporated into post-pandemic practice. In all of this, there is an obvious role for government. They need to get in the game and they need to keep their eye on the ball. We have for years been calling on the government to fund the national vision desk at Health Canada and develop a national vision strategy as a touchstone for future policy and regulatory decision-making.

 We’ll continue to do so. It's in the best interest of patients. This study of The Cost of Vision Loss and Blindness in Canada effectively highlights the need for this. We must all work together to provide the best possible health solutions for Canadians. I'm very proud of the work we are all doing to provide vision health and eye care. And I look forward to continuing to work with all of you. Thank you. Thank you for inviting me today.

KG Thank you very much, Dr Mann. Moving from the medical side to the blindness side, I might say this study would not have happened without Louise Gillis, sitting in the background, egging us all on. Louise is very quiet. You never hear from her. But she's always there and she's always supportive. And it's been wonderful working on this project, knowing that you're always there to catch our back, whatever the expression is, something. I'd like to introduce Louise Gillis, president of the Canadian Council of the Blind.

00:52:38

LG Thank you, Dr Gordon. It's a great pleasure to be here today to work with you folks. And having listened to what all the folks before me have said, understand why it’s important that the Canadian Council of the Blind wanted to have this study and have commissioned it. With that, I’ll just get into a little bit of my report. People living with vision loss in Canada will experience a wide range of other health-related impacts, which may reduce their overall quality of life.

 The degree of impact on a person's wellbeing is tied to the severity of vision loss. While they’re experiencing mild vision loss, may have a limited impact upon an individual. Severe vision blindness is likely to impact a person's day-to-day life, causing difficulties with completing daily activities without assistance and possibly even worry and anxiety. Just take a good look at the report and you'll see all of the things that the doctors before me have mentioned.

 And just to come now to a more personal level, I can briefly explain what my eye condition is. Very suddenly, on September 23rd 1996, at 9:05 AM… And I am specific, because that's exactly when it happened. I had a retinal vein occlusion in the right eye and followed with haemorrhaging, which resulted in damage to part of the retina and hence loss of some central vision. Shortly thereafter, I had a major increase in the intraocular pressure and damage to the optic nerve.

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 I was already just basically blind in my left eye because I had a similar occurrence 20 years before and did not recover much sight in that eye. All this resulted in not only a sudden loss of sight, but a sudden loss of independence, my career, my ability to drive and a need for assistance in many aspects of life. This cost was not only on me, but on my family and friends and my loss of employment.

 Costs incurred include a major decrease in income, many more trips out of my home city to another city for eye appointments, because it was not available here for me locally. By the way, there were no actual treatments available in 2010 for retinal vein occlusions or macular degeneration and those types of things that affect with diabetes retinopathy. It is then in 2010 that I became president, of course.

 And that's when Nova Scotia came on board for receiving treatments for these types of diseases. And that is a long story for another time. The fact that I live with one of the provinces in Canada that does not have access to accessible devices programme, I had to find ways to purchase expensive technology to assist me in daily living. I am not the only one person with this issue. In fact, I feel rather fortunate that I still have useful sight and able to do what I'm currently doing.

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 I can manage many things better than most and that's why I'm so pleased with that. That's what has [unclear] and wanting to ensure that we follow our motto or mandate from the Canadian Council of the Blind, is to improve the quality of life for persons living with sight loss and also to prevent blindness. That was my strive to get going, including the reason why I approved this study to be activated and to be actually engaged in working to improve eye care solutions for Canadians.

 The cost of vision loss was estimated as, Dr Gordon mentioned before, 32.9 billion. This includes 17.5 billion in reduced wellbeing. And that's where we are living with vision loss. And that's about 65% of the people. The financial cost of vision loss was estimated to be over $12,000 per Canadian. With better treatment options, reduced travel, improved employment and improved standards of care, we can reduce these numbers.

 We can ask our governments, as Dr Nelson mentioned. The five different points that he mentioned are very, very important to improve that quality of care. The economic cost of my purchasing power, plus lots of more, as an example, of ways that can help others. The economic costs per person were highest for people aged 15 to 64 years due to the impact of productivity losses. This is where I fit in during my early needs. And now I am in that next group.

00:58:38

 Wellbeing costs per person were highest for people aged 65, as I had mentioned, and due to the greater proportion of people with severe vision loss. Again, if there's any means to prevent this early sight loss, then we need to do it by having yearly exams, as mentioned. And clearly, vision loss is life-changing and burdensome for those with lived experiences.

 Given vision loss imposes costs across individuals, employers, government and other parts of society, government and industry, patient groups and other stakeholders should extensively collaborate to ensure that individuals with vision loss are empowered to support and integrate into society in ways that lessen the personal and financial strain for vision loss on their lives. The study also shows that people with vision loss may pay for a number of aids, equipment or home modifications because of their conditions.

 These include items such as guide dogs, installing handrails in bathrooms, magnifying glasses or just equipment that will enlarge our mail and items that we want to read. That’s like a CCTV. GPSes so that we can travel about the community or where we need to go by just listening to what's in our paths and using that type of technology. Electronic mobility devices and similar products used to assist persons living with vision loss.

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 The cost of aids, as I mentioned earlier, is on the individual. And the majority of people do not have any plans to cover this cost. And therefore, are left without. This affects the ability to become employed or manoeuvre through the traffic to get to work. This is where we truly need to improve the quality of life by getting accessible device programmes in all the provinces. Ontario and a couple of other provinces have some care, but the majority of Canadians do not.

 And this is what I'm really speaking for today, is to lead our governments into making programmes more available to give us a better quality of life. It's very apparent that we as Canadians need to act so that all individuals are able to live without barriers. And barriers, there are many of them around, as we take a walk and just go for a common walk around the park, we have to have either somebody with us or using canes and other tools that we might need to find our way to get to the other side of the park or to see what's there.

 And for those who would just like to improve their quality of life, have the opportunity to receive the aids that are needed. Please work with us in providing these accessible devices for all. And I speak now basically for persons with sight loss, because that’s what we are. But it’s for all people with disabilities. There are many people who don't have what's needed to give them independence. Let's take the results that were found here and recommendations found in the study to reduce the cost of sight loss and increase personal wellbeing.

01:02:27

 And make sure that we get a national vision strategy. Please work together with us all and change what it means to be blind so that we are able to function better in life. Thank you very much and talk to you again. Bye now.

KG Thank you very much, Louise. I would now like to introduce Doug Earle, who’s president of Fighting Blindness Canada. I might say I don't think there's more than half a dozen days in the last three months that Doug and I haven't been speaking to each other. Doug has been really, really actively involved in every aspect of the study. And the study is what it is because of Doug and the rest of us, but Doug has been a major contributor. With that, I'll pass it over to you, Doug.

DE Thank you, Keith. And it has been a journey. I’m very, very pleased that Fighting Blindness Canada could respond to the Canadian Council of the Blind’s invitation to be a part of this report and to work with our optometry and ophthalmology colleagues in order to be able to update these numbers. And really, Louise shared what it means, what daily life impact that this report is about.

 And in fact, that number that Dr Gordon talked about, the $32.9 billion that is growing to 56 billion by 2050, 65% of that, the report found, is borne by people living with vision loss and their families. And Louise shared a little bit about what it means. And it has an impact and we need to do something about it. And that really speaks to the eight million Canadians that in 2019 were living with a blinding eye disease that if left undiagnosed and untreated, could/can lead to blindness.

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 And that's already in this report, we found, the 1.2 million that have had vision loss already. That that is expected to grow to two million by 2050. Those numbers are quite alarming. One in five Canadians are living with a blinding eye disease that needs to be diagnosed and needs to be treated. And that really is why Fighting Blindness Canada was brought into fruition by the love of family members who were experiencing their loved ones that had vision loss.

 And wanted to have treatment options and wanted to either prevent blindness or restore their sight. And as Dr Nelson talked about, this growing number of people that are at risk and the people that are having experience vision loss, research is where Fighting Blindness Canada focusses our efforts in order to develop those new treatments that can help us reduce the numbers, reduce the people that are at risk.

 Deloitte could only find $20.9 million of vision research in 2019. When you think that the federal government spends over a billion dollars in health research, this has to change. And we need your help to do that. Our ageing population is going to be much more impacted, which is why those numbers are growing to two million, without us developing new treatments. And we've already seen it.

01:06:35

 Our friends with Dr Mann at the Canadian Ophthalmological Society worked on a report that we drew on by Deloitte for this cost of blindness last year with the Conference Board of Canada. That found innovative medicines are reducing the costs and helping save sight. And I look at the impact of these diseases that early diagnosis research has already delivered treatments that three out of four, if diagnosed early, we can stabilise their sight and prevent blindness.

 And Doug Purdy in Vancouver is an example of that. For 14 years, from his early diagnosis, he has been treated with anti-VEGF treatments. He also has glaucoma in one eye and he's been taking those drops for 14 years. His sight has stabilised. He has not lost or developed any further complications because of these innovative treatments, the anti-VEGF for AMD and diabetic-related vision loss and glaucoma and new surgical procedures for cornea.

 This is what research has already delivered. And even though we found in the report, Deloitte found that we spent almost a billion dollars more on pharmaceuticals than we did a decade ago, the cost to direct healthcare did not go up by 50% like the number of people living with vision loss. And that is innovation at work. That is research paying off. Today, we need to invest in research.

01:08:18

 We need your help to tell government to invest in vision research, because our ageing population will need it. We can make a dent in that two million number. We can make a dent in the 1.2 million number today and we can reduce the risk for those eight million Canadians. Access to treatment was one of the key findings of this Cost of Vision Loss and Blindness report. Today, Jenna and Adam in Pickering are losing 10,000 photoreceptors a day because of their diagnosis with an inherited retinal disease.

 Yet Health Canada, in October 2020, approved a treatment called Luxturna that could actually stop and prevent their further loss of photoreceptors. It is a shame. It is unnecessary that they lose any more photoreceptors if we can have access to this treatment on provincial healthcare coverage. So that there's no economic barrier to be able to restore sight for these people that are living with this new, first-approved gene therapy in Canada.

 That's the power of research. That's the power of access to treatments. Also in this report, there's a story around that is amplified by Pierre, just outside of Montreal. He was a mechanic. He had to leave his job because of his eye disease. And access to clinical trials so that people can gain access to these new treatments at the earliest possible moment. Pierre actually had to go to the United States to be able to get his gene therapy as a part of the clinical trial.

01:10:09

 And it's the simple things in life that can mean so much. For Pierre, it’s the richness of the colour of his favourite lid of the jar of his peanut butter, but it's also that his two grandchildren will not have to experience the economic impact of what he experienced, because they have the gene that he has. We're proud at Fighting Blindness Canada, thanks to our donors, to be able to invest in order to bring clinical trials to Canada.

 We made an investment in Montreal with Dr Koenekoop. And we've expanded clinical trials from two to now nine and more, as he's being quite keen because of leveraging our investment into his practice. And we are making an investment in Toronto. We've been running a patient registry across the country because that's how research can impact how we can bring clinical trials so that people like Pierre can regain their sight.

 This report also pointed out that people like Fran in Calgary, who are living with diabetes-related vision loss, who the innovative treatments didn't work, that anti-VEGF treatment, didn't stop the bleeding in her eye because of the diabetes-related complications. We need access to other treatment options. This report says, tells us, gives us the facts that we need to communicate to policymakers. Her alternative treatment is not covered by provincial healthcare, yet it works.

01:11:47

 It stops her bleeding and it's actually restoring a degree of sight for her. She's hopeful that she may get her licence back as a result of this treatment. Isn't it a shame that we don't have access to innovative medicines in Canada? And Dr Mann mentioned another factor. This report found that the number of cataract surgeries have been flatlined for over ten years. Basically, it's the same number of surgeries that are taking place that are being covered by our provincial governments.

 And this is a crying shame because it's increasing the risk. It's adding to wait times. It's increasing the risk of falls. It's increasing the complicated, complex surgeries that are developing because of older eyes, the more damage being done by the cataracts. It’s interesting. The Financial Accountability Office in Ontario identified that there's been that impact that Dr Mann talked about with COVID. Before, the average goal in Ontario, just as one example, one province, was 182-day wait time.

 And not everyone was achieving that. In fact, we showed, from evidence discovered by Deloitte, that the wait times were increasing because there were more people needing the surgery than what was being provided in that flatlined cataract surgeries. And of course, we know in Ontario, the Financial Accountability Office identified 114,000 Ontarians had their cataract surgeries cancelled because of COVID, in the wave one and now in wave three.

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 And that the average day of 182, Deloitte Canada, in a study that they did, found that it added 75 days to the wait time. That 182, add another 75. And there are parts of this country where the wait times for cataract surgeries are over 335 days. Add another 75, because of the impact of COVID. This is why this report was important. This is why, for Fran, for Pierre, for Doug Purdy in Vancouver, for Jenna and Adam in Pickering, we need you to stand up.

 We need you to go to stopvisionloss.ca, sign our petition for a vision healthcare plan. The federal government, as we discovered when doing this report, has made the commitment to the World Health Organisation and Canadians three times, since 2003. Most recently is in 2020, for the third time, made the commitment to develop this plan. It's time and we need your help.

 Please sign our petition at stopvisionloss.ca so that we can add your voice as we call on government, as we work together as vision partners in order to move forward an agenda that stops this emerging crisis of preventable blindness. Invest in research, access to treatment and encourage the policymakers to develop a strategy that will prevent blindness. Thank you.

KG Thank you very much, Doug. Much appreciated. I guess I won't see you tomorrow?

DE No, but we have another meeting on Friday. We’ll take one day off.

01:15:30

KG Moving along, I'd like to introduce Morgan Ineson, who's going to moderate the question and answer session. We're encouraging people to put in their questions on the Q&A at the bottom. Maybe you can talk about it, Morgan.

MI Sure, yes. You have two ways to send in your questions. You can go ahead and type them into the Q&A box. It’s at the bottom of your Zoom window. Or you can also send me an email at education@fightingblindness.ca. And I will be checking that as well. Why don't we dive right in? I see there's lots of questions coming in, which is great.

 We have a question here from Chris, who says, with the division of responsibility for healthcare between the provincial and federal governments, how do you see a national vision care framework being built?

KG Doug, do you want to address that?

DE Sure. First off, we do have a public health agency and [inaudible] there is a national role to play. And our partners have been advocating [inaudible] to target populations with [inaudible] and have access to treatment, equitable access across the country. Those are all standards that can be implemented by a federal national health strategy. But it is a partnership at all levels of government, whether it be at your local government, with your provincial governments who have a healthcare mandate to deliver.

01:17:13

 And it is going to require the community stepping up in order to provide its feedback, guidance and encourage the government on a national level. To set standards funded in a health accord would be lovely. That vision desk can do an awful lot to drive the agenda and to encourage and to work with the provincial governments to improve access to care, access to treatment.

KG Michael, do you want to add anything to that?

MN Yes, I'd love to. I can add something to that. As Doug mentioned, the Public Health Agency of Canada, they have these desks. And these desks are not unique. They have other desks. And I'll give one example. They have a dental desk at Health Canada that recognised the importance of our dental and oral health for all Canadians. And the Government of Canada establishes that that's an important issue for Canadians to have proper oral health.

 We feel that vision, arguably, should be at the same level. And we should have equal… A vision desk at Health Canada. They should view our vision as important as our teeth. And it seemed odd that we don't have that, but it's a priority we've all been asking for.

KG Colin, do you like to add anything?

01:18:46

CM Yes. Certainly, Doug has covered some of the major points. Some of the things that are federal responsibilities that pertain to vision care, provinces get their money from the federal government. And the principles of that delivery can be governed by the federal government. But in addition, issues around health promotion, disease prevention are crucial as well. We spend a lot of money on treatments of eye diseases, but those are also influenced by the rate of those diseases.

 If we can address it in a comprehensive way nationally and looking at overall issues of health promotion and disease prevention, then that's really money well spent in a coordinated approach. It requires, as Doug said, a coordination and cooperation between all the stakeholders. And that's best done at a federal level. And that's where vision health desk would come in.

KG Thanks, Colin. I'd like to add a little bit myself. The federal government gets involved in a lot of issues associated with vision, in particular, research. The Canadian Institutes of Health Research are federally-funded. And, I don’t know, since forever, we've been advocating to have a standalone vision institute at the Canadian Institutes of Health Research, so that vision issues could be properly identified and properly funded.

 Currently, vision gets subsumed in a whole bunch of other diseases. And the other diseases seem more important. And there’re very, very few research studies that are funded by the Canadian Institutes of Health Research. That’s one aspect. Another thought I had is that if there is a national vision health plan, there is a model that the provinces can use to look at their provincial plans. And it all has to fit together.

01:20:45

 Healthcare is executed at the provincial level, but it has to fit within a federal framework. And I think we need that framework first for everything else to come together. Louise, do you want to add to…?

LG No. I think you folks have answered pretty much there. There's probably more questions that we need to go to. But I echo everybody's voice on that one as well.

KG Thanks, Morgan.

MI We have a question here specifically for Dr Gordon. Actually, a couple of people are asking about this. When you were preparing the study, did you look at comorbidities or co-occurring impairments when calculating the cost? Or has there been any work done in this area?

KG We didn’t specifically look at comorbidities. The numbers that are there are the primary reason for vision loss. If you had glaucoma and cataracts and glaucoma was the reason you lost your vision, but you just happened to have cataracts at the same time, you would be counted as a glaucoma person. I think that's how these studies generally are done. And we absorbed all of that information from other studies.

01:22:02

MI Shauna is also asking here, she sent an email, contingent on adequate coverage from the government or insurance companies, what role do you think vision-enhancing assistive technology can play to help lower The Cost of Vision Loss and Blindness in Canada?

KG Since I'm with the CCB, I [unclear]. Or either Louise and I should probably address the issues associated with technology. Louise, do you want to say something or?

LG I think assistive technology is very important for all of us to be able to reduce the fact of going for a walk and not being able to find where you need to be and what obstacles may be in your way. You can fall over something because you don't see it. But if you have proper equipment to go with you, then those obstacles will be there and not… And that can be as simple as an app on a telephone. Many of us cannot afford to have the smartphone run this app.

 Or if we get a smartphone and then we can't afford to have the app that goes with it that will help us to have a sighted person on the other end of the phone watching what's in our way and going along. There's several different programmes there. But they are costly in the fact that you have to pay so much per month for them and people on low incomes don't have that. We don't have it and you go for the walk, you run into the placards and things that are on the streets around that maybe your cane doesn't actually pick up.

01:23:45

 Or any other things or walking in front of a silent car for instance, say, an electric car. There are so many different things that assistive technology can prevent us from having accidents of one sort or another when we're out and about. But it also can improve our mental health. We're having technology to read to us or to do something in our downtimes at home, especially during this time of pandemic when we're all shut in. We can't get out.

 But if you have a book to read or something to listen to, but you need the equipment for that too, because you just can't turn a page and read the letters on the page. It's very important to have some form of assistive technology financing for people who have vision loss in particular. Turn it over to you, Dr Gordon.

KG And I'd like to add a little bit to that. I think to me, technology has dramatically changed the lives of people with vision loss. The most important device in the life of anybody with vision loss, I don't know if you can see this, but that's an iPhone. And iPhones have a million apps that enable people to do a lot of things. I talked about the high cost of lost productivity that we revealed in our study.

 There is technology that enables people to fully participate in a work environment through using computer applications that just open up the computer and make everything accessible to them. I think it's absolutely essential that people have access to these devices, to these applications and to this technology. As Louise said, it's important that it be funded so that people can actually apply for a job knowing that they have the technology that will enable them to do the job.

01:25:51

 We found that a lot of employers are not, in fact, providing the technology that people need to do that job. Technology is essential and we need to have access to that technology. And ultimately, when governments pay for that technology, they'll bring down the cost to the society and to the governments of vision loss. Anybody else want to chip in? You want to carry on, Morgan?

MI We have several people who are asking about dissemination. How is the report going to be shared with the government, health ministers, Health Canada? And is there any way that people out there listening in can get involved and help with that?

KG I think Doug can answer that better than I can.

DE All of us have been busy reaching out to the federal government, provincial governments to communicate the urgency of improving health policy around vision loss. But directly around this report, we have been in touch with the prime minister's office, the federal health minister's office and, of course, Minister Qualtrough and her role in disabilities. We've reached out to every MP. We've requested a meeting with every MP in order.

01:27:28

 And provided them the links to the study and to the summary that Dr Gordon put together. I know each of our organisations have been having meetings with various representatives. We've reached out to the premiers and the health ministers in each of the provinces to deliver this report. But really, what we need is for you to step up and visit stopvisionloss.ca. You can join the petition. We have other plans, if we don't get our meetings that we're asking for, where we will need your help to correspond.

 And we’ll provide you vehicles to do so, so you can add your voice about the importance of these issues. There is speculation a federal election is coming soon. This is an opportunity if you'd like to get involved and add your voice. Please visit stopvisionloss.ca, sign our petition and we'll get back in touch with you as we continue the conversations with the political decision makers, the health policy decision makers, in order to share the results of this report and implement new health policies that will reduce this emerging crisis of preventable blindness.

KG Can I just add that there was an insert in Maclean's magazine last week? And there was one in the Hill Times today. We’re getting the word out in a number of different ways. And Doug’s dealt with all the others. Anybody want to add to that?

01:29:14

LG I'll just say, anybody that has a copy of it and they want to give it to their family and friends, just share it out. And that's the way word gets around. Encourage everybody to come to the stop vision loss website and sign on. Friends, your neighbours, your relatives. Thank you.

KG Thanks. Morgan…

DE I can just give one more example. For example, with support of our vision partners, we did an approveluxturna.ca website. We got, within 48 hours, well over 3,000 emails to premiers, health ministers. And we got a meeting with the Pan-Canadian Pharmaceutical Alliance where it was stalled, to get that conversation going. We would not have gotten that meeting if it wasn't for people stepping up. And that's why it's so important that they should visit stopvisionloss.ca and sign the petition.

KG Thanks very much, Doug. And Morgan, what's the time not like?

MI I think we have time maybe for just one last question. In the chat, someone's asking, given all this information, what can patients do right now to help advocate for their eye health? We’ve talked about going to stopvisionloss.ca. They're asking, how can they push for better care and treatment access when they're in the doctor's office?

KG I guess we should ask the doctors. Who wants to go first? Dr Mann or Dr Nelson?

01:30:48

CM I think the conversation needs to happen between patients and their practitioners. One of the things that we find in our contacts with government, with officials who are involved in the healthcare system, is that often people don't understand some of the basics about eye health and about the conditions that affect and threaten eye health. And I think it behoves all of us to have that conversation with those around us, with our family, friends, with those who are in our circle, about the importance of eye health.

 The personal stories that we've heard today that Doug just shared and Louise has shared are impactful. And hearing those personal stories and understanding why vision health is so important to all of us and why it's relevant to all of us. We've heard statistics today to show that none of us are going to be untouched by this if we look at our families and our extended group. And having that conversation with your practitioners, but with your circle as well, about the importance of eye health and why all the things that we've heard today are important.

 It's up to all of us to have those conversations and improve education of those around us.

KG Thank you, Dr Mann. Dr Nelson?

01:32:11

MN I would agree. I don't really have anything to add to that. I think Dr Mann sums that up quite well.

KG Any other perspectives, Louise or Doug?

LG I'll give my perspective. I think too, what's most important is when a person has a problem with their vision, just don't say, it will go away tomorrow. Because it may not go away tomorrow. If you feel that your eyesight is worse today by a major amount, then you need to contact somebody, whoever your eye carers are. That's where you need to talk. And an incident that happened with me, my ophthalmologist moved away and COVID happened.

 And then I was to see somebody else. The other new doctor coming in did not arrive. I was left in limbo. And it is only through my optometrist that I was able to get more immediate care. Because when I went in, there was an issue and he got me into an ophthalmologist right away. Otherwise, I would not have been able to get there until next month, which would have been several weeks too late because there was a major increase in my glaucoma pressure.

 That is on new medication and it's better. You have to really go and dig for yourself sometimes and really promote your own care that you need to be looked at if you feel that there's really a major change. You find somebody who is going to help you. That's most important.

DE If I can just add…

01:33:56

KG And Louise… Sorry.

DE Sorry.

KG Can I just chip in before you, Doug, because it follows on from what Louise said? As part of the study, we talked to a number of ophthalmologists across the country. And pretty well all of them said that they had patients that came into them after the lockdown that had lost vision as a result of not coming to see them during the pandemic. It’s essential that one gets to see your ophthalmologist, at the very least, have a discussion. Sorry, Doug.

DE Actually, Keith, we’ve been spending too much time together because that's exactly what I was going to say. That with COVID, we heard from the community hesitancy to go see their optometrist for their regular eye exam and to see their ophthalmologists for other treatment opportunities. And I think it's absolutely vital both on the optometry and the ophthalmology side. They've really taken to heart after, all of us, that initial shock of the pandemic a year ago.

 And they've really stepped up. We thank them for keeping us, being able to see each other after this is all over. And I encourage people to contact their eye doctor for, whether it's the regular exam, for their upgrades of their glasses, etc., or to their ophthalmologist for cataract and, say, AMD, diabetic-related glaucoma, whatever. That really, you and your colleagues have really stepped up if you've done everything that you can with the PPE and the keeping us safe.

01:35:50

 And I must say I used to work at the Toronto Western Hospital and I've never seen it sparkle like it does today, thanks to the pandemic and the great ophthalmology programme at the Toronto Western Hospital. And I strongly encourage people, if you get some warning signs, if you have questions, call your eye specialist. Ask those questions. Ask the questions about the COVID protocols. But most importantly, make sure that you get your treatment.

 Go, ask the questions, get your treatment, because we just can't… After this is all over, we have to be able to see each other.

CM I think that's quite right, Doug. And as I mentioned during my remarks, the key is, no one group can do this alone. There has to be a collaborative approach across the whole eye care team into meeting this backlog and debt of care and in advancing vision health in general. The solutions to the immediate problem are the same as the long-term solutions. We need to be efficient with our resources. We need to work together with defined care pathways.

 And we need to innovate. We need to fund research. And we need to continue the conversation with patients as to how we can best meet those needs. I think that conversation has been started today and this report has moved that forward. And we look forward to doing that in the future.

01:37:22

KG Thank you very much, Colin. And Morgan, I think we'll call that a day. And are there any closing remarks that anybody would like to make before we introduce our final speaker? Having said that, I would like to introduce our final speaker. He's not on the screen right now, but his name is Jim Tokos. And Jim Tokos is the incoming president of the Canadian Council of the Blind. Louise Gillis is soon to become past president of the Canadian Council of the Blind. And Jim Tokos just wanted to say a few words in closing today’s proceedings.

MI I'm going to put Jim up in just a second. I just wanted to, again, remind everyone about the stopvisionloss.ca. My other two quick little housekeeping items are that when you leave the webinar today, a survey will pop up. Take your two minutes to fill it out. It just really helps us when we're planning our future educational events. And to that note, I did also want to invite everyone here to also join us on Wednesday, June 9th for our next View Point, Fighting Blindness Canada's next View Point.

 We're going to also be talking about The Cost of Vision Loss and Blindness in Canada report, but from a slightly different angle. We're going to be speaking with people who are living with vision loss and their perspectives on the report to really bring these results to life. You can register for that at fightingblindness.ca. I hope you will join us. Again, that's on Wednesday, June 9th. And now I will hopefully be able to turn it over to Jim.

01:39:09

JT It gives me great honour on behalf of, not only the Canadian Council of the Blind, but those across Canada living with vision loss to thank this wonderful, tireless leader who has changed the landscape of our organisation to reflect what is of utmost importance to those of us living the experience of vision loss in Canada. As CCB president, Louse Gillis, whom I'm proud to say I've known since 2007 as both friend and colleague, has strengthened the voice of the council.

 Most importantly, Louise has taken the CCB in a new direction, adopting innovative perspectives and partnerships to fully engage our community in advocating for, not only the highest quality of eye care treatment, but in preventing vision loss. During her term as CCB president, Louise has enjoyed many accomplishments, but expressed her greatest pride in her role in affirming CCB with the Government of Canada and the many stakeholders across Canada who supported the passage of the Accessible Canada Act, ACA.

 Participation in today's summit on The Cost of Vision Loss and Blindness in Canada is the last official act of Louise Gillis as CCB president. She leaves on a high note this crowning achievement of having overseen the council's lead role in the most consequential report on vision loss in a decade. The Canadian Council of the Blind has certainly grown and taken on a much stronger leadership role with its partners to those representing its millions of persons living with vision loss and/or blinding eye disease across Canada.

01:45:56

 The accomplishments of the CCB under the guidance of Louise Gillis are many and are best left for another day as past president Louise promises to stay close and be available as an advisor. Sometime tomorrow, a new president of the CCB will be named. We can all be assured that the new voice will be strong. There will be continuity and we will be steadfast in our role as the voice of the blind in Canada.

 All while fully following the footsteps of Louise in working to achieve a better quality of life for our community, the blind, deaf-blind and visually impaired community. Thank you and good luck, Louise.

LG Thank you, Jim. And thank you everyone for attending today. This has been great. And I will be there as an advisor and continue to be part of CCB well into the future. Thank you again.

KG Thank you very much, Jim. And I'd like to thank all of our panellists, Louise, Dr Michael Nelson, Dr Colin Mann, Doug Earle and last but by no means least, Morgan Ineson for putting this all together and for coordinating the Q&A. Thanks to everybody. I ask you to pay attention to your emails because there is more to come as we do a study to look into the impact that COVID has had on all of this that has been presented to you today. Thank you very much.

01:50:05