

# THREE ISSUES AFFECTING THE HEALTH AND WELL-BEING OF SENIORS IN MANITOBA: ORAL HEALTH, HEARING AND VISION



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MAY 17, 2014

Centre on Aging



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How to cite this report:

O'Rourke, D. Three Issues Affecting the Health and Well-Being of Seniors in Manitoba: Oral Health, Hearing and Vision. Winnipeg MB: Centre on Aging, University of Manitoba, May 2014.

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# EXECUTIVE SUMMARY

Now more than ever, with the baby boom generation heading towards retirement and rising life expectancy, there is increased attention to fulfilling the health needs of the growing senior population. The recognition of the connections between specific aspects of health, such as **oral (dental) care, hearing and vision**, and overall health is growing. With aging, there is an increased need for care and support in these areas, and higher consequences as a result of poor oral health and hearing and/or vision impairments.

This document provides a summary of the current literature, funding programs and services for seniors in relation to the issues of oral health, hearing and vision. The intention is to raise awareness of the impact of these issues on the health of senior Manitobans and to promote enhanced and equitable access to programs and services.

The information in this document was collated through multiple sources. A literature review was conducted in each of the three health areas to identify current evidence-informed trends and effects on the health of seniors. In addition, local and national content experts were contacted and interviewed either by telephone or in-person to gain an understanding of the Manitoba and Canadian perspective of each of the three issues. And lastly, the review of government and non-profit organizations' websites and documentation provided information to compile a national scan and provincial/territorial comparison of programs and services, as well as identifying other services and supports available to seniors. Unless noted specifically, in this document '**senior**' is defined as persons 65 years of age and older.

The information pertaining to the areas of oral health, hearing and vision are presented separately in stand-alone sections. **Each section** outlines;

## ***The Issue***

- Consequences of poor health/impairment
  - \* Individual
  - \* System and societal
- Senior groups/populations at risk
- Barriers to accessing care and services

## ***Existing Programs***

- ***Funding/payment options***
  - \* Provincial
  - \* Federal

- **Programs and services**

- \* Provincial
- \* Federal

- **Provincial scan** of services, programs and coverage

### **Gaps and Opportunities for Improvement** in Manitoba

Although each issue presents with unique information and challenges, some commonalities are noted between the three issues. **Common themes** that emerged include:

1. Consequences of poor health/impairment in the three areas:
  - \* For the individual – Poor health outcomes, safety concerns and risk of injury, and reduced quality of life; and
  - \* For the broader system and society – Increased direct and indirect costs to the health care system, decreased paid and volunteer workforce productivity, negative impact on social determinants of health, and perpetuation of ageism in society and public policy.
2. Seniors at higher risk for the consequences of poor health/impairment in the three areas:
  - \* Limited income;
  - \* Residents of rural and remote/northern communities; and
  - \* Dependence on others for care, including those with cognitive impairment and residents in long-term care settings (personal care homes).
3. Barriers to accessing care and services:
  - \* Financial limitations to pay for the cost of services and devices;
  - \* Access to services (i.e. individuals in long-term care and rural/remote communities); and
  - \* Lack of knowledge about the issues and services available among the general public, affected individuals/families/caregivers, and health professionals.

The provision of oral/dental care, hearing aids and eyeglasses are not insured services covered under the Canada Health Act. However, **funding, programs and services** for oral health, hearing and vision care may be available through provincial/territorial programs or to select, eligible individuals via federal programs. Federal and provincial publically-funded programs accessible to seniors can be grouped into the following categories (in order of most to least inclusive) and include services available to;

- All individuals (i.e. health services covered by provincial/territorial health plans or by regional/municipal health authorities);
- All seniors defined by an age requirement (i.e. 60 or 65 years of age and older);
- Low-income seniors; and

- Specific identified and eligible groups (i.e. Veteran's Affairs Canada, First Nations and Inuit, immigrants/refugees, recipients of Income Assistance).

The majority of seniors do not qualify for publically-funded services provided through income assistance or federal/provincial programs, resulting in a significant gap for those who may not be considered low income but do not have sufficient resources to pay for the services or aids themselves.

Provincial/territorial funding programs that are in place for oral, hearing and vision care vary greatly in eligibility and available coverage. A summary and comparison of provincial/territorial programs and services is provided [on page vi](#). Northwest Territories, Nunavut and Yukon are notable examples in all three areas, providing programs for dental care, hearing aids and eyeglasses coverage for all seniors regardless of income. Also regardless of income, Quebec is noted to have a hearing aid plan that provides coverage to seniors, and Manitoba has an Eyeglasses Program that provides partial coverage to seniors for eyeglasses. Alberta has examples of income-adjusted and cost-sharing programs that offer levels of coverage based on income level or full coverage for low-income seniors. Ontario's Assistive Devices Program (ADP) is an example of a cost-share program that provides financial assistance for persons with disabilities to obtain needed assistive devices based on need.

And lastly, ***gaps and opportunities for improvements*** to programs and services in Manitoba are provided for each of the three issues. These considerations arose through discussions with local and national experts, identification of innovative approaches and programs in other provinces/regions and research-informed opportunities.

## Provincial Comparison of Provincial/Territorial Senior's Oral Care, Hearing and Vision Programs

Refer to category definitions on page 7.	Oral Care			Hearing			Vision				
	Senior's Dental Program	Senior's Dental Program (Limited income)	Senior's Dental Services	Medical-Dental Coverage	Public Audiology Services	Hearing Aid Program	Hearing Aid Program- Cost-share or limited income	Regulation of Hearing Aid Dealers (Appendix A)	Vision Test Coverage	Senior's Eyeglasses Program	Senior's Eyeglasses Program (Limited income)
<b>Manitoba</b>		✓	✓	✓	✓			✓	✓	✓	
<b>British Columbia</b>				✓	✓***			✓	✓		
<b>Alberta</b>		✓	✓	✓	✓	✓	✓	✓	✓		✓
<b>Saskatchewan</b>				✓	✓		✓	✓			
<b>Ontario</b>		✓**		✓	✓	✓	✓		✓		
<b>Quebec</b>				✓		✓		✓	✓		
<b>Nova Scotia</b>				✓	✓			✓	✓		
<b>New Brunswick</b>				✓	✓						
<b>Prince Edward Island</b>	✓*			✓	✓						
<b>Newfoundland and Labrador</b>				✓	✓	✓	✓	✓			
<b>Northwest Territories</b>	✓			✓	✓	✓			✓	✓	
<b>Nunavut</b>	✓			✓	✓	✓			✓	✓	
<b>Yukon</b>	✓			✓	✓	✓			✓	✓	

\* Preventative services for LTC residents only

\*\* Offered by specific municipalities

\*\*\* Not all adults eligible – specific criteria applies



**Comparison Table Definitions:**

Senior's Dental Program: Includes publically-funded dental programs for seniors regardless of income.

Senior's Dental Program (Limited income): Includes publically-funded dental programs for seniors with limited income (not including coverage available for individuals receiving income assistance).

Senior's Dental Services: Speciality or outreach programs designed to meet the needs of seniors' groups, e.g., long-term care, limited mobility, house-bound, etc.

Medical-Dental Coverage: Coverage for medically necessary dental procedures, e.g. oral or facial surgery due to trauma or disease; repair of facial/jaw fractures, etc.

Public Audiology Services: Publically-funded audiology assessments (hearing tests) and services provided by the province or health region/authority at no cost to the individual.

Hearing Aid Program: Includes publically-funded hearing aid programs for seniors regardless of income.

Hearing Aid Plan (Cost-share or limited income): Includes publically funded dental programs for seniors that are either a based on a cost-share model for higher income or available at no cost to those with limited income (not including coverage available for individuals receiving income assistance).

Regulation of Hearing Aid Dealers: Legislation or regulations in place that regulates the licensing and practice of hearing practitioners and/or the dispensing and selling of hearing aids and devices.

Vision Test Coverage: Publically funded routine eye exams for seniors.

Senior's Eyeglasses Program: Includes publically-funded eyeglasses programs for seniors regardless of income.

Senior's Eyeglasses Program (Limited income): Includes publically-funded eyeglasses programs for seniors with limited income (not including coverage available for individuals receiving income assistance).



# ORAL HEALTH

Oral health refers to the health of one's mouth and teeth. It has a fundamental impact on the health, function and well-being of the general population, yet oral health is often viewed as being peripheral to overall general health. However, there is a growing body of evidence that suggests a relationship between poor oral health and chronic disease, and this relationship is especially evident when considering the senior population (Ontario Ministry of Health, 2012).

It is estimated that 47% of Canadian seniors aged 60–79 have periodontal disease (Health Canada, 2010) which can lead to pain, infection, gum disease, tooth loss and psychosocial consequences. These conditions can result in impaired dentition, dietary concerns, involuntary weight loss, social isolation and depression, and ultimately contribute to a chronic disease state or decline in general health. Research also suggests that seniors with accessibility challenges and those living in long-term care facilities are at high risk for poor oral health and dental care (Morales-Suarez Varela et al, 2011; Nova Scotia Department of Health, 2006;).

With baby boomers heading towards retirement and rising life expectancy, there has been increased attention to fulfilling the oral health needs of the growing senior population (British Columbia Dental Association, 2008; Nova Scotia Health Promotion and Protection, 2008; Nova Scotia Department of Health, 2006; Ontario Ministry of Health, 2012). Currently, gaps in seniors' oral care exist and are likely to rise in coming years among the more vulnerable groups, in particular among those with restricted incomes.

Good oral health is largely dependent on: 1) daily oral hygiene practices, and 2) having access to timely assessment, treatment and follow-up provided by dental professionals. Medically and cognitively compromised seniors who are dependent on others for care (i.e. residents of long-term care homes), are at risk for poor oral care. Currently in Manitoba, a publically funded seniors' oral/dental health program does not exist. The majority of seniors do not qualify for publically funded dental services provided through income assistance or federal programs, resulting in a significant service gap for those who cannot pay for dental services themselves.

## The Issue

### What are the Consequences of Poor Oral Health for Seniors?

Overall, neglect of oral health can have major physical, emotional and social consequences that have a negative impact on the individual and also result in additional strain to the health care system, especially when it leads to increased use of emergency services.

## Individual Consequences

### 1. Oral/dental health issues:

Poor oral health care can contribute to root caries (cavities), periodontal disease involving the gums, tissue and underlying structures, oral ulcerations from broken teeth, oral infection, halitosis and xerostomia. According to the Canadian Health Measures Survey (CHMS) 2007-2009, seniors between 60–79 years of age had more root cavities (43%) than younger adults (6%). Seniors also tend to experience a higher incidence of adverse periodontal conditions (Health Canada, 2010).

### 2. Oral-systemic link:

There is a growing body of literature that demonstrates the links between poor oral health and systemic health conditions and non-communicable diseases. Periodontal disease can result in increased inflammation burden in the body due to pathogens that cause local infection and bacteremia. The resultant inflammatory response has been found to be a major risk factor for both chronic heart disease and chronic renal disease (Fisher et al, 2010). Research also suggests a two-way association between periodontal disease and the management of and effect on diabetes. Periodontal infection has been found to have an adverse effect on glycemic control and the presence of diabetes can create a higher susceptibility to infections. Additionally, periodontal disease has been associated with an increased risk of diabetic complications (Taylor and Borgnakke, 2008). Lastly, rheumatoid arthritis and gum disease are both chronic inflammatory conditions, and researchers have discovered that the management of periodontal disease also has a beneficial effect on the signs and symptoms of rheumatoid arthritis (Ontario Ministry of Health, 2012).

### 3. Pneumonia and Lower Respiratory Tract Infections (LRTI):

Studies have indicated that poor oral hygiene in seniors is a major risk factor for aspiration pneumonia. The micro-organisms that cause pneumonia are commonly found in significantly high concentrations in the dental plaque of seniors with gum disease. Daily oral hygiene has been found to reduce the incidence of fatal and non-fatal pneumonia and LRTI in seniors who are hospitalized or in long-term care (Ontario Ministry of Health, 2012; Rosenblum, 2010).

### 4. Nutritional status:

Edentulousness (complete loss of all natural teeth) and poor oral health have been connected to under-nutrition, malnourishment and unintentional weight loss (Gil-Montoya et al, 2013; Ritchie et al, 2000; Sumi et al, 2010). The CHMS found that 22% of adults from 60–79 years of age are edentulous (Health Canada, 2010). With the presence of mouth/teeth problems or pain, there is a tendency to eat less-healthy, prepared foods with less nutritional value or to reduce or avoid eating altogether. The provision of oral care alone has been found to maintain the nutritional status of seniors who require care (Sumi et al, 2010).

### 5. Reduced disease screening and early recognition:

Regular oral examinations increase the chances of early detection of mouth infections and oral cancers, thus the potential to reduce morbidity and mortality. In addition, osteoporosis is characterized by decreased bone density and dentists are in a good position to identify people with osteoporosis as early signs of the disease can often be seen in the mouth and detected through oral examination and dental x-rays (Ontario Ministry of Health, 2012).

## 6. Quality of life and emotional well-being:

Gum disease, broken dentition or infection as a result of poor oral care and health can result in unnecessary pain and suffering for the individual (Morales-Suarez Varella et al, 2011). Poor dentition and halitosis can cause embarrassment and decreased self-esteem, which can lead to a loss of the ability and desire to communicate with others, resulting in social isolation and depression.

### **System and Societal Consequences**

Poor oral health also has the potential for broader-reaching impact and ramifications to the health care system and society at large.

1. **Increased costs to the health care system:** This could include increased provider visits, medications, emergency room visits, and hospital admissions in relation to managing oral/dental disease and chronic conditions associated with poor oral health (Rosenblum, 2010; Taylor & Borgnakke, 2008).
2. **Reduced workforce productivity:** For non-retired or partially retired seniors, sick time costs related to dental issues or visits can create additional burden on human resources and system supports. When accounting for all adult age groups, the CHMS reported 4.15 million working days were lost annually due to dental visits or dental sick-days (Health Canada, 2010). In addition, withdrawal of activities or functional roles in society, such as paid or volunteer positions, due to the emotional consequences of poor oral health can have a negative impact on the available workforce.
3. **Social responsibility and elimination of ageism:** Good oral care and health is a necessity aspect of overall health. Therefore, there is a need to advocate for a broader community and public system mandate and social responsibility to support oral health in those that are high-risk and/or not able to obtain needed dental care due to income limitations. Many provincial/territorial oral and dental health programs have focused on the needs of high-risk children. Available oral and dental care services for high-risk seniors groups are felt to be a gap not consistently addressed by our health and social networks of support (British Columbia Dental Association, 2008; Nova Scotia Health Promotion and Protection, 2008; Nova Scotia Department of Health, 2006; Ontario Ministry of Health, 2012).

### **Who is at Risk for Poor Oral Health?**

In general terms, as a higher incidence of chronic medical conditions, polypharmacy, heavily restored teeth and oral disease is seen with aging, the increased oral health needs of seniors place this age group at higher risk of impaired oral health when compared with the younger adult population.

Typically, oral health practices and preferences developed in the younger adult years continue into older age. If an individual did not engage in or seek regular, preventative oral/dental care in their younger years, it is unlikely that this behavioural preference will change as they age. For seniors who engaged in preventative daily oral care activities and sought regular professional preventative and treatment services in their younger adults years, this pattern tends to continue as long as individuals remain well, are mobile and have adequate financial resources. However, there are a number of risk factors that become evident when considering seniors at higher risk for poor oral health and dental conditions.

1. Impaired health status:

- a. Poor medical or physical health: Individuals with multiple chronic diseases, mobility issues and/or who are taking multiple medications are considered at higher risk due to the connection between chronic disease and poor oral health, the challenges of accessibility to dental services and care and medication side effects (Avlund et al, 2001).
- b. Mental health issues/cognitive impairment: The presence of dementia or other mental health issues can create challenges with the provision of oral health and dental care. Individuals may be unable to advocate for themselves or display responsive behaviours when oral or dental care is attempted, potentially leading to the use of psychotropic/sedative medications or the cessation of attempts to provide daily oral care.
- c. Residents of long-term care: Are a high risk population for poor oral health as they would tend to fall in either or both of the above cohorts.

2. Limited income:

In Manitoba, seniors who do not qualify for the federally funded dental programs, are not eligible for Employment Income Assistance (EIA) and are not able to afford dental insurance or needed oral and dental care are at risk for poor oral health. Specifically single female seniors are considered to be an even higher-risk group within this cohort as they more often fall within the lowest income bracket.

3. Residents of remote and rural communities:

Individuals living in rural or remote communities in Manitoba are at higher risk due to the limited availability of a range of dental services (mostly private dentist clinics) and accessibility (transportation). The exception to this would be the remote northern communities who receive fly-in dentist services via Health Canada First Nations and Inuit Health (FNIH).

4. Dependence on others for care/management of affairs:

- a. Long-term care: It is not uncommon for individuals' oral health status to deteriorate once they enter a long-term care setting. Age and disease may affect the teeth and gums generally but this decline tends to be due to environmental issues, such as lack of adequate oral care. One study of 1,167 nursing home residents in the United States found that only 16% received oral care, none had their teeth brushed for two minutes and none were offered a mouth rinse (Coleman and Watson, 2006). Other factors impacting the decline of oral health in LTC include the provision of liquid nutritional supplements throughout the day without providing follow-up mouth care and increased tendency of poor oral cavity clearing and pocketing of food.
- b. Home Care: Procedures are in place for the provision of oral care in the home care setting; however, the person receiving care is dependent on the care providers' time and ability to provide best practice oral care.
- c. Financial management: If an individual receives financial management assistance via a Committee or Power of Attorney (POA), this person may have different perspectives on financial priorities and preferences and may not consider dental care an area of importance.

5. Immigrants or refugees: Individuals who are new to the province are entitled to emergency dental care services only.

### What are the Barriers to Accessing Oral/Dental Care?

The oral health status of Canadians has been improving over the last few decades. This improvement can be attributed to the increase in the use of fluorides and an increase in the overall access to professional oral health care (Health Canada, 2010). Despite these gains, Canadians continue to experience a high rate of dental disease and this burden of illness is disproportionately represented by individuals of low socio-economic status, those of First Nations descent and new immigrants. In the senior population, there is also a greater disproportion of burden of illness due to the barriers seniors experience in accessing oral health care.

1. Financial cost:

With retirement, income levels tend to decrease and the number of individuals with dental coverage through private insurance is also less. As oral/dental care is not a publically insured service in Manitoba, unless eligible for a federal or income-g geared program, individuals must pay for dental services. Even if private health insurance is in place, premiums are costly and plans cover only a percentage of cost up to a yearly maximum, which limits the ability to receive major restorative care. Thus, out-of-pockets expenses are also incurred even when private insurance is in place. With aging, there is an increased need for proper oral and dental care with less dental program coverage and less income to address these needs (Health Canada, 2010).

2. Mobility and accessibility:

Seniors with limited mobility and transportation challenges may have difficulties getting to and from dental clinics. Accessibility issues within community clinics and offices may also present barriers if the environment is not wheelchair accessible. Some individuals with mobility concerns may have difficulties even transferring into the dental chairs.

3. Acceptability of geriatric clientele and complexities:

Few dental professionals have formal education in gerodontology. Practitioners may not have the comfort level or experience to address the complexities that arise when providing dental care to seniors. Although many seniors have dentures, there has been a significant increase in the number of people keeping their natural teeth well into old age (BC Dental Association, 2008). Many seniors have heavily restored teeth and with the combined effects of medications and chronic disease, teeth breakdown over time and require significant geriatric dental expertise to manage. Other challenges specific to seniors include; frailty, low tolerance and fatigue at appointments, and cognitive impairment with responsive behaviours and resistance to care. These conditions may create difficulty for some seniors to be assessed and treated in regular, community-based dental clinics.

4. Residence in long-term care settings:

Residents in Manitoba personal care homes (PCH) may experience barriers to proper oral health due to the lack of:

- \* Consistent application of oral care standards;
- \* Resources to conduct detailed mouth assessments on admission and on a routine basis;
- \* Training for staff on oral care procedures;
- \* Staff resources to provide proper oral care to residents; and
- \* Appropriate equipment and products to provide oral care (required to be purchased by the family or resident as these items are not provided by the PCH).

5. Residents of rural and remote communities:

Dental services available in rural communities are largely provided by private practice clinics. Currently there are no community or public clinics offering reduced-rate dental services (similar to [Access Downtown](#) and [Mount Carmel Clinic](#)) in rural communities (although Access Downtown may accept clients from outside Winnipeg). This can present financial and access barriers to individuals living in communities outside of Winnipeg.

Although individuals in some northern and remote communities are serviced through the federal dental program where dentists are flown into communities on a scheduled basis, this service is treatment-oriented and public health services are not typically available.

6. Public awareness and education:

Many seniors in the general population are not aware of the importance of oral health and the connection to general health. For others that are seeking services, some are unsure where to go for information on available programs, or may not have the technological accessibility or savvy to access or navigate on-line resources. A growing concern is that only 12% of seniors over the age of 65 possess the literacy skills necessary for making basic health-related decisions (Public Health Agency of Canada, 2010). If seniors are not able to access timely information or if they are not able to comprehend available information, this can create a barrier to accessing needed services.

7. Professional awareness and education:

Within health disciplines outside of dentistry, there is a lack of interprofessional education in relation to oral health being an integral aspect of holistic health care. Perceptions of allied health providers need to be enhanced to raise awareness and promote an interprofessional approach to advocate for oral health as a health priority.

## Existing Programs for Seniors

### What Funding or Payment Options are Available for Senior's Oral/Dental Care?

The bulk of dental care is not an insured health service provided under the Canada Health Act. A small number of seniors may be eligible for dental coverage under federal or provincial/territorial public health care plans. However, this is applicable to the minority of the population as only 6% of all Canadians are covered by publically funded dental insurance (Health Canada, 2010).



With the exception of a few publicly funded programs, seniors have to rely, for the most part, on private insurance policies or their own financial means to cover dental and other oral health services. The CHMS found that 53% of adults between 60 and 79 years of age did not have any dental insurance, compared to 32% in the overall population. The percentage of seniors without any dental insurance was found to increase with advancing age, in lower income brackets and among residents of personal care homes (Health Canada, 2010; Ordre des dentistes du Québec, 2007).

### **Manitoba Funding Options**

Currently, Manitoba does not have a publically funded dental/oral health program specific to seniors and the majority pay for services out-of-pocket. Some medical dental services are provided under the Hospital Services Regulation and include jaw surgery, impacted wisdom teeth and oral/facial care and surgery related to cancer or trauma.

Provincial income assistance is available to eligible low-income individuals or families. The Manitoba Employment Income Assistance (EIA) general program provides income assistance to eligible recipients up to 65 years of age. The EIA disability program provides income assistance to eligible recipients of any age with a disability. EIA recipients receive coverage for general dental care. Participants may receive dental services after three months of enrolment, except general assistance adults who must wait 6 months.

The Manitoba EIA Single Grant may be available to a Manitoban at any age, where an applicant has sufficient resources to meet his or her basic monthly living costs but is unable to meet the cost of an immediate health need. This one-time grant may be issued for drug, emergency dental and optical needs, as well as medical equipment.

Although not specific to seniors, another potential source of financial assistance for dental care is accessible through two community dental clinics situated in Winnipeg that offer reduced-cost dental services for low income individuals of any age. Additional information on these services is outlined in the [Oral/Dental Care Programs](#) section.

For Manitoban seniors with the financial means, private insurance options are available to assist in the cost of dental and oral health care needs. To outline cost and coverage, the following two examples are provided:

- Manitoba Blue Cross has a variety of plans that offer dental coverage. The Plus Plan is the least expensive plan that includes dental insurance. The following are highlights of this plan:
  - \* Coverage includes accidental (maximum of \$1,000 per accident), basic and major dental care (covers 80% of fee guide amount to a maximum \$600 per person/year).
  - \* The premium rates are as follows: Single 65+ \$71.55–\$82.40 /month; Couples 65+ \$135.95–\$156.75/month.
  - \* There is a 3 month wait for coverage after initial approval of application.
  - \* Additional details can be found at: [www.mb.bluecross.ca/files/individual/2013%20Individual%20Health%20Rates.pdf](http://www.mb.bluecross.ca/files/individual/2013%20Individual%20Health%20Rates.pdf)

- Great West Life offers limited dental plan options for seniors:
  - \* PlanDirect is the option for individuals between the ages 60-75 years.
  - \* Seniors up to 75 years of age are eligible to apply if the individual has had prior health insurance coverage in the last 60 days.
  - \* No premiums are advertised and interested applicants are asked to contact an advisor for a quote.

### **Federal Funding Options**

Within the federal government system, currently there are no specific seniors programs for dental assistance or coverage. Three programs exist to provide dental assistance for specific, eligible groups:

Veterans Affairs Canada provides financial assistance to qualified Veterans for health care services or benefits available through the fourteen (14) Programs of Choice (POC). POC 4 provides basic dental care and some pre-authorized comprehensive dental services. The VAC dental program covers up to 100% of the rates in the Provincial Dental/Denturist Association fee guide. Examples of services that are covered include:

- Basic treatments up to \$1,500 annually;
  - \* Exams, polish and fluoride treatments (every 9 months)
  - \* Scaling (8 units per year)
  - \* Fillings and extractions
- Standard dentures once every 7 years; and
- Other comprehensive work such as crowns and bridges subject to pre-authorization.
- Additional information available at: [www.veterans.gc.ca/eng/services/health/treatment-benefits/poc#poc4](http://www.veterans.gc.ca/eng/services/health/treatment-benefits/poc#poc4)

The Non-Insured Health Benefits (NIHB) program provides health and dental services to First Nations and Inuit residents of Canada. Benefits are also applicable to seniors in this demographic. Dental services that are covered include:

- Diagnostic services (exams and X-rays):
  - \* Exams: Adults are eligible for up to three (3) examinations in any 12-month period, and
  - \* X-rays: Eligible for six (6) single x-rays in any 12-month period.
- Preventive services:
  - \* Scaling (cleaning)/Root planing (deep cleaning): Adults are eligible to a maximum of four (4) units in any 12-month period, and
  - \* Polishing: Adults are eligible once (1) in any 12-month period.

- Restorative services:
  - \* Fillings,
  - \* Crowns,
  - \* Endodontic services (root canals),
  - \* Pulpotomies and pulpectomies,
  - \* Open and drain (pain relief emergency service),
  - \* Prosthodontic removable services (dentures, partials),
  - \* Orthodontic services (limited range of covered services),
  - \* Oral surgery services (extraction), and
  - \* Adjunctive Services (sedation).
  - \* Schedule A: These are categories of dental services that do not require predetermination but may have frequency limitations. Examples include cleanings, denture repairs, exams, X-rays, extractions (simple), fillings, open and drain (emergency procedure), preventive services, and root canals (for adult front teeth).
  - \* Schedule B: These are categories of dental services that require predetermination. Examples include crowns, dentures, extractions (complicated or surgical), orthodontic services (braces), root canals for posterior teeth, and sedation.
  - \* Additional information is available at: [www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/index-eng.php](http://www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/index-eng.php)

The Interim Federal Health Program (IFHP) provides temporary dental coverage to immigrants or refugees based on specific criteria but services are limited to emergency dental care only. Additional information is available at [www.cic.gc.ca/english/refugees/outside/summary-ifhp.asp](http://www.cic.gc.ca/english/refugees/outside/summary-ifhp.asp)

Service Canada provides sources of general income subsidy to eligible Canadian seniors which could offer an indirect source of funding for costs relating to dental and health care needs. The following programs are available:

- Canada Pension Plan (CPP) provides pensions and benefits based on previous contributions when contributors retire, become disabled, or deceased.
- Old Age Security (OAS) is a monthly payment available to most Canadians 65 years of age and older who meet the Canadian legal status and residence requirements. In addition to the Old Age Security pension, there are three types of Old Age Security benefits:
  - \* The Guaranteed Income Supplement (GIS) is a monthly non-taxable benefit that can be added to OAS pension of low-income seniors.
  - \* The Allowance is a benefit available to the spouses or common-law partners aged 60-64 of Guaranteed Income Supplement recipients based on household income levels.

- \* The Allowance for the Survivor is a benefit available to people who have a low income, who are living in Canada, and whose spouse or common-law partner is deceased.

The Canada Revenue Agency allows for any Canadian to claim additional health expenses (including dental, vision and hearing) on their personal income tax return up to 3% of net income to a maximum of \$2,152.

## What Oral/Dental Care Programs and Services are Available for Seniors?

### Manitoba Programs and Initiatives

The majority of dental care in Manitoba is provided through private practice dental clinics located in various community locations around the province and offer services provided by dentists, dental assistants and dental hygienists. Payment is typically fee-for-service as well as accepting coverage from private and publically funded dental insurance (e.g. income assistance, VAC, etc.).

The Centre for Community Oral Health (CCOH) is affiliated with the Faculty of Dentistry at the University of Manitoba and offers geriatric-oriented oral and dental care outreach programs:

- Deer Lodge Centre (DLC) Clinic: Provides fee-for-service dental services for the residents of DLC, staff of DLC, and seniors and individuals within the surrounding communities.
- Home Dental Care Program: This outreach program provides basic dental care services for seniors who are unable or have difficulty visiting a regular clinic. Utilizing two dental mobile vans, dentists, hygienists and dental assistants visit PCHs and home-bound individuals. Services are provided on a fee-for-services basis and the costs are higher due to overhead as a result of the mobility of the clinic. An initial assessment fee of \$50.00 is charged which includes an exam and development of a treatment plan. Further approval for costs is sought prior to additional work being completed.

The CCOH also offers other outreach clinics and programs which are not specifically geared to seniors but may be of benefit to some:

- \* Access Downtown: This non-profit CCOH clinic is located within a Winnipeg Regional Health Authority (WRHA) Community Health Centre on Main Street and reaches out to underserved communities. The CCOH's philosophy works toward improving oral health by providing clinical and health promotion services. The fully equipped clinic is staffed by a fulltime dentist and two additional support staff and offers a full range of dental services. It offers services to individuals of all ages and reduced rates to those with limited income based on a sliding income scale (proof of income required).
- \* Manitoba Developmental Centre (MDC): Located in Portage la Prairie, the MDC is a residential care facility for adults with mental disabilities. The CCOH provides MDC residents with dental care in two fully equipped clinics, and provides a range of dental services including emergency care. This clinic has a Geriatric Program component for senior residents.

- \* Churchill Dental Clinic: The Churchill Dental Clinic is a fee-for-service public clinic and operates to meet the dental needs of residents from Churchill and surrounding areas. Seniors in this region are able to access the clinic's services. The clinic is staffed by a dentist, dental hygienist, dental assistant and receptionist and provides individualized dental services on a monthly basis.
- \* Health Promotion Unit: The goal of the CCOH's Health Promotion Unit is to promote the improvement of oral health for underserved populations in addition to providing clinical services. The Unit is committed to serving those in long-term care, several Northern communities, and the Home Dental Care Program (mobile van). To meet this goal, the Unit staff have delivered numerous training seminars, workshops and presentations on oral care to numerous health care providers. Resources to promote oral health in long-term care, such as fact sheets and videos, have been developed and posted on their website: [http://umanitoba.ca/faculties/dentistry/ccoh/ccoh\\_longTermCareFacts.html](http://umanitoba.ca/faculties/dentistry/ccoh/ccoh_longTermCareFacts.html)

Mount Carmel Clinic is a non-profit community clinic that provides health services to underserved populations in Winnipeg with a focus on north-end residents. Basic restorative dental services are available to individuals with limited income on a fixed scale based on net annual income (proof of income required). However, individuals are not refused service based on the inability to pay. Emergency care can usually be accommodated with short notice; however, the waitlist for basic services is approximately 2-3 months.

The Faculty of Dentistry at the University of Manitoba offers dental services at reduced rates to all ages provided by supervised dental students. Costs are approximately 60-65% of the Manitoba Dental Fee Guide. To access the Faculty services, clients must be able to travel to the University of Manitoba and be able to tolerate longer treatment appointments due to the nature of the teaching environment.

### **Federal Programs and Initiatives**

The Office of the Chief Dental Health Officer falls under the Health Promotion and Chronic Diseases Prevention branch of the Public Health Agency of Canada (PHAC). This office was created with the purpose to promote oral health best practices and recognition/inclusion of oral health into to general health maintenance. The Office works at provincial/territorial, national, and international levels with policy makers, professional organizations and national partners and interest groups to promote oral health best practices and further research interests in this area. Some of the Office's current projects and work impacting senior's oral health issues include;

- Dental Elder Abuse Response (DEAR): The DEAR project is designed to raise awareness and dialogue among the general population about dental elder abuse and neglect issues and to encourage planning and documentation of future oral care wishes (akin to an Advanced Health Care Directive but in relation to oral care).
- Data collection and research efforts:
  - \* Within the Canadian Health Measures Study, the Office is advocating for an increased focus on oral health in the next survey cycle and to also include adults 80 years of age and older (survey only captured information on adults up to age 79).

- \* A study of the Oral Health Status of the Homeless in Toronto is in the planning stages.
  - \* Support of the Oral Health of our Aging Population study, which is a Dalhousie research project with the objective to examine dental health issues in Nova Scotia adults over the age of 45.
- Support of the Federal, Provincial, Territorial Dental Working Group which is a forum of oral health professionals consisting of representatives from each of the provinces and territories. This working group's efforts are aimed at facilitating exchanges of information and expertise, for issues such as delivery of health services and policy or strategy development.
  - Investigation and documentation of the status of water fluorination in Canada and providing evidence-informed recommendations.
  - Commissioning of a scan of dental public health human resources across the country.

## Provincial Scan of Dental Services, Programs and Coverage

All provinces/territories provide medical dental services to all residents under insured health services plans. These services typically include dental or oral surgery due to trauma, cancer or other illnesses. For provincial/territorial residents eligible for income assistance programs, basic dental care services are typically covered.

Northwest Territories, Nunavut and the Yukon are the only 3 out of the 13 territories/provinces that offer publically-funded seniors' oral health benefits through Extended Seniors' Health Plans, regardless of income. Alberta, Newfoundland and a few regions in Ontario provide publically-funded dental assistance/programs to eligible low to moderate-income seniors. Prince Edward Island has implemented a Long-Term Care Facilities Dental Program where residents of public and private long-term care facilities are eligible for preventative and screening services provided by dental hygienists. Details of provincial/territorial programs and services are provided in the table below.

Province or Territory	Oral/Dental Programs and Services
<b>Manitoba</b>	<p>No senior's dental program.</p> <p>Employment and Income Assistance (EIA): Provides general dental care for recipients up to 65 years of age and adults of any age with disabilities. EIA Single Grant available for low income of any age for a health-related need.</p> <p>Two reduced-rate clinics in Winnipeg for qualified low-income clients. University of Manitoba Faculty of Dentistry offers services provided by students at a reduced rate for all age groups.</p> <p>Manitoba Health Services: Provides oral and facial surgery for medical reasons to all Manitobans.</p>
<b>British Columbia</b>	<p>No senior's dental program.</p> <p>The BC Employment and Assistance Program's dental program provides basic dental services to income assistance clients who are least likely to become financially independent: Persons with Disabilities and Persons with Persistent Multiple Barriers. Dental services beyond biennial limits will be covered when emergency services are needed to relieve pain. <a href="http://www.eia.gov.bc.ca/factsheets/2005/dental.htm">www.eia.gov.bc.ca/factsheets/2005/dental.htm</a></p> <p>Numerous reduced rate clinics throughout the province for qualified low-income clients. Low-cost preventative dental hygiene preventative services are available to B.C. residents at dental hygiene colleges.</p> <p>Medical Services Plan: Provides medically required dental or oral surgery to all B.C. residents.</p>
<b>Alberta</b>	<p>Alberta Health Services: For seniors 65+ years, the Dental Assistance for Seniors program provides up to \$5,000 of coverage per person every five years for eligible (basic and preventative) dental services for low- to moderate-income seniors. To be eligible for full coverage, total household annual income must be less than \$25,800 for single seniors and \$51,600 for senior couples; for partial coverage, income must be less than \$31,675 for single seniors and \$63,350 for senior couples. <a href="http://www.health.alberta.ca/seniors/DOA-eligibility.html">www.health.alberta.ca/seniors/DOA-eligibility.html</a></p> <p>Mobile Dental Clinics: To help address the access barriers that seniors experience in relation to obtaining oral health care, two mobile dental clinics, situated in specially out-fitted motorhomes, are used to provide on-site fee-for-service dental services</p> <p>Alberta Health Care Insurance Plan: Provides medically required dental or oral surgery to all Albertans.</p>
<b>Saskatchewan</b>	<p>No senior's dental program. Saskatchewan Assistance Program - Supplementary Health Program: Recipients are eligible for emergency dental services for relief of pain and infection. If approved for full benefits, coverage includes payment for a range of basic dental services. <a href="http://www.saskatchewan.ca/residents/health/prescription-drug-plans-and-health-coverage/extended-benefits-and-drug-plan/supplementary-health-benefits">www.saskatchewan.ca/residents/health/prescription-drug-plans-and-health-coverage/extended-benefits-and-drug-plan/supplementary-health-benefits</a></p> <p>Medical Services Plan: Provides oral surgery provided in hospital as result of trauma, required medical care.</p>

Province or Territory	Oral/Dental Programs and Services
<b>Ontario</b>	<p>Some municipalities provide financial assistance/programs to low-income seniors for dental care. Examples include: Toronto Public Health: Public dental clinics offer free basic and emergency dental services for seniors who are not able to pay; free dental screening in senior's facilities (LTC, retirement homes, etc.).</p> <p><a href="http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=29574485d1210410VgnVCM1000071d60f89RCRD&amp;vgnextfmt=default">www1.toronto.ca/wps/portal/contentonly?vgnextoid=29574485d1210410VgnVCM1000071d60f89RCRD&amp;vgnextfmt=default</a></p> <p>Peel Health Region Senior's Dental Program: Provides free basic dental services to low income seniors – 65+ years (18-24 month wait list). To be eligible must have an income of less than \$19,597 for one person household or \$23,850 for a two person household. <a href="http://www.peelregion.ca/health/topics/commndisease/dental/seniors-dental-program.htm">www.peelregion.ca/health/topics/commndisease/dental/seniors-dental-program.htm</a></p> <p>The Halton Oral Health Outreach (HOHO) Program provides access to oral health preventive and treatment services to adults with special needs and low-income seniors. The program provides oral assessments, oral health promotion, co-ordination of services and referrals for treatment. <a href="http://www.halton.ca/cms/one.aspx?portalId=8310&amp;pageId=10362">www.halton.ca/cms/one.aspx?portalId=8310&amp;pageId=10362</a></p> <p>Ontario Works: Discretionary coverage is provided for adults (each municipality decides the level of dental coverage).</p> <p>Ontario Disability Support Program (ODSP): Provides coverage for adults with disabilities.</p> <p>Several universities and colleges offer dental care at a fee generally less than what private practitioners charge.</p> <p>Ontario Health Insurance Plan (OHIP): Provides coverage for some dental surgery, including fractures or necessary jaw reconstruction when done in a hospital.</p>
<b>Quebec</b>	<p>No senior's dental program.</p> <p>The Québec Ministry of Health and Social Services provides a dental care program for patients requiring radiation due to head and neck cancer. The 10 clinics that provide radio-oncology services also provide basic oral health coverage without any additional cost to head and neck cancer patients. Services include complete dental examinations, fluoride treatments, dental extractions, cleanings, fillings, periodic examinations and removable dentures.</p>
<b>Quebec</b>	<p>Recipients of last-resort financial assistance may be entitled to covered dental services.</p> <p>Several universities and colleges offer dental care at a fee generally less than what private practitioners charge.</p> <p>Régie de l'assurance maladie du Québec: Provides coverage for certain oral surgery services in the event of trauma or an illness.</p>
<b>Nova Scotia</b>	<p>No senior's dental program.</p> <p>Income Assistance: Coverage for emergency dental care.</p> <p>Dental Surgical Program: Covers procedures that require hospitalization.</p>



Province or Territory	Oral/Dental Programs and Services
<b>New Brunswick</b>	<p>No senior's dental program.</p> <p>Health Services Dental Program: Adult recipients of income assistance and individuals with special needs are eligible for coverage of basic dental services to a maximum of \$1000 per year, excluding emergency and prosthetic services. A 30 per cent participation fee for dentures and denture repairs is charged.</p> <p>Insured Surgical-Dental Services: Covers oral and facial procedures/surgery.</p>
<b>Prince Edward Island</b>	<p>No senior's dental plan, except for residents of long-term care.</p> <p>Long-Term Care Facilities Dental Program: Residents of public and private long-term care facilities are eligible for the following services: Annual screening by a public health dentist, to look for signs of oral disease(s) and condition(s) that are likely to result in pain, and to assess the need for simple preventative procedures that can improve quality of life. Dental hygienists follow-up by providing preventative services such as cleaning and labeling of dentures, scaling teeth, application of fluoride varnish, etc. Residents with dental treatment needs are referred to private practice dentists. <a href="http://www.healthpei.ca/dentalhealth">www.healthpei.ca/dentalhealth</a></p> <p>Seniors receiving social assistance are eligible for emergency dental benefits as provided by a dentist or dental surgeon for the relief of pain and infection only.</p> <p>PEI Hospital and Medical Services Insurance: Covers certain oral surgery procedures performed by an oral surgeon when it is medically required that they be performed in a hospital.</p>
<b>Newfoundland and Labrador</b>	<p>Adult Dental Health Program: Select diagnostic and therapeutic dental services are available once every three years to adults who are covered under certain Newfoundland and Labrador Prescription Drug Program plans:</p> <ul style="list-style-type: none"> <li>• The Foundation Plan, which provides 100 per cent coverage to those in receipt of income support;</li> <li>• The Access Plan, which provides support to low income families and individuals; and,</li> <li>• The 65+ Plan, which provides coverage to residents 65 years of age and older who receive Old Age Security benefits and the Guaranteed Income Supplement</li> </ul> <p>Eligible services include an examination and two x-rays every three years, routine fillings on a three year cycle, extractions, and there is a denture component allowing the delivery of standard dentures once every eight years.</p> <p><a href="http://www.health.gov.nl.ca/health/dentalservices/general_info.html">www.health.gov.nl.ca/health/dentalservices/general_info.html</a></p> <p>Newfoundland and Labrador Medical Care Plan (MCP): Covers certain surgical-dental procedures which are medically necessary to be performed in hospital by a dentist or oral surgeon</p>

Province or Territory	Oral/Dental Programs and Services
<b>Northwest Territories</b>	<p>Extended Health Benefits Seniors' Program: Non-Native and Métis residents of the NWT who are 60 years of age and over are eligible for up to 100% coverage for the cost of eligible dental services to a determined annual maximum. Covered services include check-ups, cleanings, fillings, extractions, root canals, crowns, bridges and dentures. <a href="http://www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-seniors-program">www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-seniors-program</a></p> <p>Dental Therapy Program: Provides emergency, preventative, restorative, periodontal and oral surgery services for all residents.</p>
<b>Nunavut</b>	<p>Seniors Extended Health Benefits: Individuals must be at least 60 years of age and not eligible for other private or public coverage. A \$1,000 annual maximum for emergency, diagnostic, restorative, endodontic, periodontal, prosthodontic, oral and surgery services is provided. <a href="http://gov.nu.ca/health/information/senior-additional-assistance-plan">http://gov.nu.ca/health/information/senior-additional-assistance-plan</a></p> <p>In-Hospital Surgical-Dental Services: Provides various oral surgical and dental procedures requiring hospitalization.</p>
<b>Yukon</b>	<p>Extended Health Care Benefits to Seniors: 100% coverage of up to \$1,400 in a two-year period. The plan may pay for dentures or rebases once in a five-year period. Must be at least 65 years of age or aged 60 and married to a living Yukon resident who is at least 65 years of age. <a href="http://www.hss.gov.yk.ca/extendedcare.php">www.hss.gov.yk.ca/extendedcare.php</a></p> <p>Income Assistance: Emergency dental care is available to adults who are receiving financial assistance.</p> <p>Yukon Health Care Insurance plan: Provides coverage for certain dental-surgical procedures.</p>

## What are the Gaps and Opportunities for Improving Senior's Oral Health in Manitoba?

As a result of the review of current dental/oral health funding and programs available for Manitoba seniors, as well as the groups at risk for poor oral health, gaps and opportunities for improvement emerged under the following areas;

### 1. Improve funding support for seniors dental/oral health services:

Ultimately, due to higher risk of oral health problems with increasing age, it would be beneficial for all Manitoba seniors to be eligible for basic dental care services. If the ideal is not possible, it is suggested that potential funding models and efforts focus on the underserved, high-risk senior populations including; seniors with low-income, individuals living in rural communities/remote locations and core urban areas, residents of long-term care facilities, and immigrants new to the province. The following are specific examples of enhanced funding support for seniors' oral care programs:

- \* Provide basic dental care services for all seniors to promote prevention and ensure freedom from dental pain and infection.
- \* Provide a publically-funded dental plan for low-income seniors. Suggested models could include:
  - A system similar to Manitoba's EIA program where the cost of services is based on the fee guide and recipients receive an approved capped amount that they can then take to any dental provider; or
  - A senior's program similar to the CCOH's S.M.I.L.E. plus program which provides dental services to children of families with limited means and no insurance coverage.
- \* Provide more accessible, community-based, income-g geared programs and clinics for limited-income seniors throughout the province;
- \* Include routine dental care as an insured provincial health service for seniors residing in PCHs, similar to the PEI Long-Term Care Facilities Dental Program. A suggested model could include an on-site initial assessment by dental professions on admission to establish an oral care plan for daily care, screen for oral and dental issues and develop a treatment plan if needed. Routine follow-up could also be provided. Access to dental professionals in long-term care could be enhanced by expanding the Home Dental Care Program and/or developing partnerships between PCHs and local community dental clinics;
- \* Include transportation funding to dental appointments for community-based seniors; and
- \* Fund fluoride preventative treatments for high risk seniors.

## 2. Integrate oral care into primary health care:

Integration of oral health into primary health care should be a priority. An interprofessional approach would strive to eliminate the barriers between oral and general health and to enhance the recognition of risk factors. As seniors have more frequent access to primary health care providers, physicians and nurses could play a key role in moving this priority forward. More primary care linkages could be provided through the Community Health Centre model (Access Centres) or within Primary Care Networks as they are developed throughout the province. Also, enhancing connections to existing geriatric programs, such as PRIME and the Geriatric Day Hospitals in Winnipeg, may help to reach out to frail, high-risk seniors that are already known to these programs.

## 3. Enhance dental public health programs and funding:

Beyond the work of the CCOH, there is a need to increase resources in public health dentistry and oral health promotion. Financial incentives may be needed as typically, dental practitioners tend to gravitate towards private family practice as wages and income-earning opportunities are higher than in public health positions.

4. Promote best oral health practices for seniors in care:

Recently, there has been increased focus on standardizing and promoting oral health best practices for residents in long-term care. The WRHA Long Term Care (LTC) Program has recently released an operational directive outlining oral health standards in Winnipeg PCHs. A Manitoba Health LTC policy is pending with the intent to shape oral health practice and care throughout the province. Further dialogue and consideration is needed as to how best to deliver and promote compliance to these standards in light of the limited resources and challenges faced in the LTC system.

For clients who are known to Home Care, this care arrangement can also provide an opportunity for enhanced oral care attention and monitoring. Similar to the suggested approach in LTC, a Home Care client's dental/oral health needs could be assessed in detail on admission to the program and appropriate referrals and monitoring initiated. The Home Care program has procedures in place for the provision of daily mouth and denture care to clients receiving personal care services and assistance. However, a provincial policy outlining oral care standards and expectations for community-provided care is not currently in place.

5. Provide oral health education to the public, caregivers and health professionals:

Public messaging about oral health should target baby boomers and focus on the importance of preventive oral health practices. There also is a need for a separate, easy-to-comprehend oral health/dentistry resource for seniors (currently under development by the CCOH).

Formal and informal caregivers require oral health education that includes the importance of oral health, proper technique and strategies for basic oral health practices when cooperation issues and responsive behaviours are present. It would also be important to impress on caregivers that the lack of oral care provision is considered neglect.

Interprofessional education for allied health providers and students is also needed to empower health professionals to integrate oral health into the evaluation and delivery of care. Potential topics include:

- \* The oral-systemic association and relationship to well-being and quality of life;
- \* Basic oral pathology;
- \* Prevention of common oral diseases;
- \* Provision of basic oral health interventions including oral hygiene promotion, nutrition and referrals; and
- \* Working within interprofessional teams with dental providers.

6. Enhance the role of and access to dental hygienists:

Although dental hygiene is a self-regulated profession in Manitoba, currently dental hygienists are not able to work independently in private practice and must be connected to a dentist, program or organization to practice. By improving access, alternative roles for dental hygienists could emerge to help improve services for underserved seniors' populations. As an example, a pilot project in one Winnipeg PCH is currently investigating the role of dental hygienists and their impact on oral care and health of the residents through individual assessment, development of an oral health care plan, education of staff and follow-up monitoring of oral health and care practices.

7. Create a recognized geriatric specialty in dentistry:

As currently most dental practitioners do not have formal education in geriatric issues, there is an opportunity to develop a specialty program or fellowship/internship in geriatric dentistry.

8. Develop/promote geriatric oral health and dentistry best practices and research:

There is an opportunity to develop a provincial best practices approach and plan to address senior's oral health care, as currently such a strategy does not exist. Part of that strategy could involve the development of a local centre of excellence for senior's oral health. A Canadian example of this model is the Centre of Excellence for Oral Health and Aging at Laval University. The Centre's purpose is to create and disseminate knowledge of the care and organization of dental services for seniors, ensure the promotion and prevention of oral diseases in the aging population, and promote knowledge transfer from research to practice.

Prioritizing research is also crucial to promoting best practice as there has not been much research focus on senior's oral care. Potential areas of enhanced research focus include:

- \* Identifying the presence of oral health practices and conditions in seniors more than 80 years of age and of residents of long-term care facilities;
- \* Integrating best oral health practices in late life;
- \* Interventions to mitigate late life oral health issues and tooth decay (i.e. application of fluoride varnish in seniors as a preventative intervention); and
- \* Effects of integrating promotion and preventative oral health practices on general health outcomes.

# HEARING

We experience the world and our environment through our physical senses and connect with others through communication. Hearing is an essential contributor to our ability to communicate. Hearing loss can have a profound effect on physical, emotional and social health and well-being. Untreated, hearing loss can lead to depression, dissatisfaction with life, reduced functional and cognitive health, and withdrawal from social activities.

Hearing loss may vary from mild loss of sensitivity (difficulty hearing normal conversation) to total loss of hearing. A number of conditions can lead to hearing loss in adults, the most common being presbycusis, a gradual, age-related reduction in the ability to hear high-pitched sounds. The second most common condition, noise-induced hearing loss, is caused by one-time exposure to extremely loud sound or by exposure to sounds at high decibels over months or years (National Academy on an Aging Society, 1999).

Hearing loss is significantly associated with aging and the prevalence and incidence is expected to increase over the coming decades due to demographic aging of the population. Speech-Language and Audiology Canada (SAC) notes hearing loss is currently the third most prevalent chronic disability among older adults. According to national data from the 2003 Canadian Community Health Survey (CCHS), about 3% of Canadians aged 12 or older self-reported some type of difficulty with their hearing compared to 11% of the population aged 65 and older. In the same survey, 11% of Manitoba seniors reported hearing loss, equivalent to the national average (Millar, 2005). The results of the 2006 Participation and Activity Limitation Survey indicated that 12% of seniors aged 65 to 74 years and 26% of those aged 75 years and older indicated having some form of hearing limitation (Public Health Agency of Canada, 2010).

Hearing loss with age may be insidious, and develop slowly and gradually over time so that the individual may not even be aware of any impairment. Therefore, survey estimates of hearing loss based on self-report are likely lower than more objective measurements of hearing function. According to information from the SAC, 20% of adults over 65, 40% over 75 and 80% of long-term care residents have a significant hearing problem. One study in the United States (Lin et al, 2011), found hearing loss prevalent in nearly two-thirds of adults aged 70 years and older in the U.S. population.

Loss of hearing has been associated with many adverse consequences for seniors including; physical, functional and cognitive impairments, falls and fall-related injuries including fractures, and social and emotional effects including reduced social contact and isolation. Although studies suggest interventions to correct hearing can improve the quality of life for hard-of-hearing adults (Ciorba et al, 2012), many seniors who could benefit from hearing help either do not seek it or refuse treatment.

A group of individuals that deserve specific mention are Deaf-Blind. Deaf-Blindness is a condition which combines any degree of hearing loss with any degree of vision loss and interferes with communicating and acquiring information, although Deaf-Blind persons may still have varying levels of useful vision and hearing. Deaf-Blindness may be due to accident, trauma, disease or other conditions and may occur as a congenital condition or develop later in life. Seniors with pre-existing hearing issues who develop vision impairment in later life, and vice versa, can be affected by Deaf-Blindness, which poses additional challenges in maintaining physical, functional and emotional health and well-being. The issues outlined in the [vision section](#) of this paper pertain to this group of seniors as well but services and programs for the Deaf-Blind will be addressed under the hearing section of the paper.

In Manitoba, hearing assessment and services are provided by audiologists and hearing instrument specialists that work in either the public or private sectors. Hearing assessments provided in the public system are funded through the provincial regional health authorities (RHAs), however, waitlists are often lengthy. Hearing assessments through private providers are most often available for no fee with the expectation that individuals would purchase recommended hearing instruments at that location.

The College of Audiologists and Speech-Language Pathologists of Manitoba regulates the professional practice of audiologists and speech language pathologists in the province. In Manitoba, hearing aid providers/dealers are not self-regulated but are required to be licensed. The licensing, examination and certification of private hearing aid dealers is defined by the Hearing Aid Act and is under the jurisdiction of the Consumer Protection Office. The Act regulates the licensing of hearing aid dealers through the Hearing Aid Board, which is responsible for both professional practice and consumer issues. The Board sets qualifications for certification and licensure and develops standards for testing, maintenance of records, advertising and may withdraw certification of any hearing aid dealer who fails to satisfy any requirements established by the Board. Currently anyone in the private sector, including audiologists, wishing to dispense hearing aids must obtain licensure through the Board. The Consumer Protection Office investigates complaints and breaches of the Act and provides decisions on rulings.

Hearing loss is initially and primarily treated through amplification using hearing aids. Hearing aid coverage falls outside the Canada Health Act and currently is not an insured service through Manitoba Health, although a number of other provinces/territories have programs in place to cover or offset costs relating to seniors requiring hearing aids.

Manitoba also has a cochlear implant program for eligible individuals for whom hearing aids no longer address their hearing loss. The initial surgery and external device is covered by Manitoba Health as an insured health service.

## The Issue

### What are the Consequences of Hearing Loss for Seniors?

Hearing loss can have profound effects on the individual and negatively affect physical, mental/emotional, cognitive and social functioning and ultimately, quality of life. It also has the potential to create significant financial burden and strain to the health care system and larger society.

#### Individual Consequences

##### 1. Physical functioning and health:

Hearing loss is associated with a decline in seniors' overall health-related quality of life, physical functioning and ratings of self-perceived health (Lopez et al, 2011; National Academy on an Aging Society, 1999; Strawbridge et al, 2000). It also have been associated with an increased risk of cardiovascular and all-cause mortality in adults aged 45 and older (Karpa et al, 2010). In addition, the auditory deprivation that accompanies hearing loss leads to decreased central auditory functioning which causes a progressive cycle of further hearing decline.

##### 2. Functional impairment:

Hearing loss can also have a negative impact on mobility and function. Hearing loss in seniors has been associated with:

- \* Dependence on others to complete activities of daily living (Lopez-Torres Hidalgo et al, 2009);
- \* Impaired mobility due to slower maximal walking speed, lower walking endurance and self-reported difficulties in walking distances (Viljanen et al, 2009); and
- \* An increased risk for falls due to balance impairment and reduced postural control (Lin and Ferrucci, 2012; Lopez et al, 2011; Viljanen et al, 2009).

##### 3. Cognitive functioning and health:

The loss of hearing has been significantly associated with lower scores on cognitive testing and the use of hearing aids positively associated with cognitive functioning (Lin, 2011). Hearing loss has also been independently associated with the incidence of all-cause dementia. However, it is debatable if this association indicates that hearing loss is a marker for early stage dementia or is a modifiable risk factor for dementia (Lin et al, 2011).

##### 4. Mental/emotional functioning and health:

In relation to their mental and emotional state, seniors with hearing loss report significantly more:

- \* embarrassment, frustration (Gopinath et al, 2012);
- \* loneliness (Kramer et al, 2002; Pronk et al, 2011);



- \* emotional distress (Gopinath et al, 2012);
- \* reports of lower self-efficacy and mastery (Kramer et al, 2002); and
- \* depressive symptoms (Kramer et al, 2002; Gopinath et al, 2012).

#### 5. Social functioning and health:

Hearing loss in seniors has also been linked to decreased social functioning (Strawbridge et al, 2000), as evidenced by:

- \* a hampered social life (Gopinath et al, 2012);
- \* smaller social networks (Kramer et al, 2002); and
- \* increased odds of social isolation in women aged 60-69 (Mick et al, 2014).

#### 6. Quality of life

As a result of impaired functioning in the areas described above, ultimately the individual's quality and enjoyment of life can be impacted in the following ways (Gopinath et al, 2012);

- \* **Communication:** With hearing loss, conversations become more difficult to hear and understand. As the individual struggles to fill in gaps in the conversation, much cognitive processing is dedicated to understanding messages, which detracts from enjoyment of the exchange. The individual may become tired, frustrated and stop trying to communicate due to these difficulties.
- \* **Personal/family relationships:** As communication challenges arise and continue without resolution, frustration within family and other personal relationships may occur which can create strain and reduced involvement in family/social networks.
- \* **Employment/active role in society:** The prevalence of hearing loss has a significant impact on a person's decision to retire, volunteer or stay active in the paid or non-paid workforce. Satisfaction with retirement is also lower for people with hearing loss than for those without hearing loss (National Academy on an Aging Society, 1999).

### **System and Societal Consequences**

Uncorrected hearing loss has significant implications for the individual but also the society at large.

#### 1. Financial implications of hearing loss:

Hearing loss is projected to be one of the top ten causes of burden of disease in high to middle income countries by 2030 (Mathers & Loncar, 2006). An Australian review (Access Economics, 2006), cited the real financial cost of hearing loss in Australia at that time was \$11.75-billion and included direct health care costs, lost productivity and cost of informal caregiving. On a per capita basis, this could represent a Canadian equivalent of almost \$18-billion per year.

## 2. Falls and injury prevention and reduction:

Falls represent more than half of all injuries in Canadians over the age of 65 and represent 85% of injury-related hospitalizations in seniors. Forty percent (40%) of falls in seniors result in hip fractures, which often lead to a permanent reduction in function. Falls are the primary reason for 40% of long-term care home admissions (PHAC, 2011) and also represent a leading cause of injury death in Manitoba seniors (Government of Manitoba, 2006).

Estimates of direct health care costs relating to seniors' falls in Canada range between \$1.1 billion (Nikitovic, 2013) to \$2 billion annually (PHAC, 2011; Scott, Wagar & Elliot, 2010). With the anticipated increase in the Canadian senior population, these costs are estimated to rise to \$4.4 billion by 2031 (Scott, Wagar & Elliot, 2010). In Manitoba, direct health care costs relating to falls in the elderly have been estimated at \$164 million annually (Government of Manitoba, 2006; SMARTRISK, 2003).

Canadian statistics estimate the cost of a hospitalization due to a trauma-related hip repair/replacement among seniors is between \$14,788 (Atlantic provinces) and \$22,200 (Alberta) (CIHI, 2010; Finding Balance Alberta, 2011). In Ontario, this number rises to \$36,929 in female seniors when attributable costs in the first year after the hip fracture are also taken into account (Nikitovic et al, 2013). It is suggested that a 20% reduction in falls would result in fewer hospitalizations and permanently disabled seniors and amount to a \$138 million annual savings to the Canadian health care system (PHAC, 2005).

## 3. Lost productivity to the workforce:

Support of individuals with hearing loss can contribute to the sustainability of a large, active, engaged and productive senior's population.

## 4. Determinant of health:

Social isolation can be a factor in a person's overall health and well-being. Promotion of a healthy, sustainable society where communication, engagement and maintenance of a positive self-image is a priority will require dedicated focus, attention and funding efforts directed towards supporting seniors with hearing impairment.

## Who is at Risk for Hearing Loss?

As a higher incidence of hearing loss due to presbycusis is seen with aging, the increased hearing health needs of seniors place this age group at higher risk of impaired hearing when compared to the younger adult population. However, there are a number of risk factors that become evident when considering groups of seniors at higher risk of the consequences related to hearing loss;

### 1. Limited income:

In Manitoba, seniors who do not qualify for government programs that provide financial assistance for hearing aids and are not able to afford private health insurance or needed hearing devices or instruments, are at higher risk. Specifically single female seniors are considered to be an even higher-risk group within this cohort as they more frequently fall within the lowest income bracket.

## 2. Residents of remote and rural communities:

Individuals living in rural or remote communities in Manitoba are at higher risk due to the limited availability of hearing assessment and services in their community and accessibility (transportation).

## 3. Dependence on others for care:

- \* Cognitive impairment/dementia: In addition to the association between hearing loss and impaired cognitive function, uncorrected hearing problems can further compound communication efforts in individuals with cognitive impairment or dementia. Individuals with dementia may not be able to advocate for themselves, recognize difficulties or a decline in hearing and seek help independently. Individuals without family/informal caregivers are at an even higher risk due to the lack of advocacy and support for health-related needs.
- \* Residents of long-term care: When living in a person care home setting, residents are dependent on staff to apply and remove hearing devices in a timely and appropriate manner and ensure correct use and functioning. It is also not uncommon for hearing aids to become lost or go missing in a personal care home setting.

## 4. Cultural diversity and language:

Widespread conductive hearing loss has been noted among First Nations people in first world nations (including Canada) due to the higher incidence of otitis media in First Nations children living in remote and northern communities. As these individuals age into their adult and senior years, hearing loss can have a continued and compounded effect on their overall health and well-being.

In a broader sense, hearing loss has a significant impact on intercultural communication and immigrant populations. Poor acoustics and cultural differences in communication styles, accents and pronunciation compound the effect of hearing loss among minority and diverse cultural groups (Howard, 2007).

## What are the Barriers to Accessing Hearing Care?

Seniors with hearing loss may face a number of barriers to accessing appropriate hearing assessment, care and services.

### 1. Stigma of hearing loss:

Many individuals may delay seeking assessment and help due to denial and the stigma of hearing loss being associated as a condition of 'old age'. Some may be reluctant to wear a hearing aid due to this stigma or belief and too often, needed devices are purchased but not worn. Certain beliefs about hearing loss and aging may also be present within the health care field and at times, physician/primary care provider knowledge and attitudes can influence whether individuals reporting hearing loss are referred on for further assessment and intervention.

## 2. Diagnostics issues:

- a. Early recognition: Age-related hearing loss is often gradual and insidious. It may develop slowly over time so that the individual may not even be aware of any impairment, or the consequences of the impairment (Miller, 2005). This may contribute to a delay in early recognition and intervention of hearing concerns.
- b. Access to timely hearing assessments: Hearing assessment and testing in Manitoba is conducted by audiologists and hearing instrument specialists. Most RHAs in Manitoba have public audiology services that provide diagnostic assessments for all ages based on self- or provider referrals. Children and urgent referrals for sudden hearing loss are considered priority. The waitlist to be seen by a public audiologist is extensive and referrals that are not considered a priority (including seniors) are subject to a lengthy wait. The current wait time for non-urgent referrals within the WRHA is estimated to be 12-18 months (J. Clark, personal communication, May 16, 2014). This results in delayed assessment, intervention and management of medication issues that impact hearing loss. The lack of public audiologists is multi-factorial and is related to:
  - The need for recruitment of additional trained staff;
  - Increased referrals and caseloads for follow-up;
  - Lack of wage parity for audiologists across Manitoba and in comparison with other provinces;
  - Lack of a local audiology education program to support recruitment efforts; and
  - Lack of program administrative support at the clinical level.

Hearing assessment is also available through audiologists and hearing instrument specialists in private practice and hearing centres. Although there typically isn't a waiting period to see a private hearing practitioner, many seniors are hesitant to seek these services due to trust issues and the fear that they will be sold an expensive product that is in the best interests of the business, not the consumer. Some then prefer to wait for the services of a public audiologist.

- c. Rural and remote communities: Some urban private hearing providers provide outreach services to smaller communities to improve access to audiology and hearing instrument services. However, many individuals from rural and remote communities would need to travel to obtain services and follow-up.

## 3. Financial cost of treatment options:

With retirement, income levels tend to decrease and the number of individuals with hearing coverage through private insurance is also less. As the provision of hearing aids/accessories is not a publically insured service in Manitoba for individuals over the age of 18 years, persons who are not eligible for other government programs (i.e. VAC, EIA, etc.) must pay for their own hearing aids and devices.

- a. Hearing aids tend to be costly, ranging between approximately \$3,500 for a basic unit up to \$10,000 for high end devices (average cost of \$5,000). The electronics wear over time and the hearing aids require replacement every 4-7 years. In addition, there is a wide range of accessories at a variety of costs (e.g. blue tooth compatible hearing aids, wireless microphones, wireless FM devices that can interface with a hearing aid, etc.). Typically

hearing aids require frequent adjustments which are completed through follow-up clinic appointments with the hearing aid provider.

b. Cochlear implants are available in Manitoba for eligible individuals for whom amplification by hearing aids is no longer effective. 30-35 procedures are conducted each year at Health Sciences Centre and the waitlist is approximately 2 years. The surgery and initial external device is covered by Manitoba Health. Future costs of new external devices/processors (approximately \$9,000-10,000), batteries (\$200-300 every 3 years) and repairs are not covered by the provincial program and must be borne by the individual.

#### 4. Regulation of hearing aid costs:

Although many aspects of private hearing aid services are regulated through The Hearing Aid Act, concerns have been raised regarding discrepancies in the costs of hearing aids due to dispensing fees and 'bundling' of related charges (extended warranty, fitting fees, etc.), as there are no caps or regulations around these types of costs. Additionally, advocates of consumer protection are calling for changes to the Act to protect the public from private companies/suppliers that go out of business and leave customers without follow-up or support.

#### 5. Public awareness and information:

Information on the importance of early recognition and detection of hearing loss in seniors is needed. For those seeking services, information may not be easily accessible considering technological abilities, language and/or literacy concerns. Also, there is an increasing demand from seniors with hearing concerns for education sessions on how to live with hearing loss. However, these resources are largely provided by volunteer organizations that have limited capacity and scarce resources to meet the demand throughout the province.

## Existing Programs for Seniors

### What Funding or Payment Options are Available for Senior's Hearing Care?

The provision of hearing aids is not an insured health service provided under the Canada Health Act. A small number of Manitoba seniors may be eligible for coverage under federal or provincial programs. With the exception of these publicly funded programs, seniors have to rely, for the most part, on private insurance policies or their own financial means to cover the costs of hearing aids and instruments.

#### **Manitoba Funding Options**

Hearing assessments conducted by a public audiologist are services provided by the RHAs in Manitoba. When considering hearing interventions, currently Manitoba does not have a publically funded hearing aid program for adults or seniors and the majority pay for hearing aid instruments and accessories out-of-pocket. If an individual of any age is eligible and requires a cochlear implant, the initial surgery and external device is covered by the province's insured health services.

For EIA participants of any age, the actual cost of hearing aids and related services is paid according to the schedule of rates negotiated with the Hearing Aid Dealers Association of Manitoba (maximum of \$500.00 per hearing aid; \$1,800 per digital/programmable hearing aid). Other costs are also covered including dispensing fees, ear impressions, ear moulds, selected hearing tests and clinic appointments for follow-up. One device is allowed per ear every four years, unless there is a medically diagnosed change in the participant's condition.

The Manitoba EIA Single Grant may be available to a Manitoban at any age, where an applicant has sufficient resources to meet his or her basic monthly living costs but is unable to meet the cost of an immediate health need. This one-time grant may be issued for drug, emergency dental and optical needs, as well as medical equipment, including hearing aids.

The Worker's Compensation Board (WCB) provides reimbursement of medical expenses, including hearing aids prescribed by a physician, resulting directly from a workplace injury. The WCB will also cover reasonable repair and maintenance of these items.

The Assistive Technology Support Program through the Society for Manitobans with Disabilities (SMD) provides funding assistance for people with disabilities to gain access to assistive or adaptive aids and devices to improve their daily lives (including hearing aids/instruments). Assistive technology is any item, piece of equipment, or product that is used to increase, maintain, or improve functional capabilities of individuals with disabilities and that helps them carry out their daily activities and maintain a healthy and independent lifestyle. The Program offers individuals 30% reimbursement of the cost of an assistive technology device up to a maximum of \$2,500 or the unfunded amount. Further details and eligibility requirements can be found at [http://smd.mb.ca/uploads/ck/files/What\\_is\\_Assistive\\_Technology\\_REVISED\\_Nov\\_12\\_2013.pdf](http://smd.mb.ca/uploads/ck/files/What_is_Assistive_Technology_REVISED_Nov_12_2013.pdf)

Community service groups such as The Kinsman Club and The Lion's Foundation also have grant programs to purchase specialized or adaptive equipment for individuals with physical disabilities and limited income. The funding can assist with the cost of various assistive technologies and devices.

For Manitoba seniors with the financial means, private insurance options are available to assist in the cost of hearing aids, although plans typically cover only a very small portion of the cost. As an example, Manitoba Blue Cross Medi-Blue Deluxe is the most economical plan that provides coverage for the purchase or repair of hearing aids (excluding batteries) when prescribed by an otologist or clinical audiologist to a maximum of \$300 per person every five calendar years. Monthly premiums for this plan are determined by age and range between: Single \$62.00-\$85.25/month; Family \$100.95-\$140.35/month.

For those that could benefit, Manitoba Health's Telecommunications Program provides assistance towards the cost of telecommunications equipment for Manitoba residents who are profoundly deaf or speech impaired and do not have coverage through another provincial or federal program. A telecommunications device allows telephone conversations to be conducted by keyboard and display terminal instead of voice. Manitoba Health will pay 80 per cent of the equipment cost to a maximum of \$428.00 and will reimburse one telecommunications device every five years.

## **Federal Funding Options**

Veterans Affairs Canada provides financial assistance to qualified Veterans for health care services or benefits available through the fourteen (14) Programs of Choice (POC). POC 3 [Audio (Hearing) Services] provides coverage for equipment and accessories related to hearing impairment. Examples of benefits that are covered include:

- Basic digital and analog hearing aids;
- Telephone amplifiers, infrared devices;
- Hearing accessories; and
- Dispensing and fitting fees for hearing aids.

The Non-Insured Health Benefits (NIHB) program provides medical equipment, including hearing aids and accessories, to First Nations and Inuit residents of Canada. Benefits are also applicable to seniors in this demographic. There is a set amount covered under NIHB. Approximately \$525 per hearing aid is covered (and the manufacturers offer a reduced rate on their product), as well as repairs after the warranty expires within the 5 year time period. Batteries are also included for the full 5 year period. Further details are available:

<http://www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/provide-fournir/med-equip/criter/audio-eng.php>

The Canada Revenue Agency allows for any Canadian to claim additional health expenses (including dental, vision and hearing) on their personal income tax return up to 3% of net income to a maximum of \$2,152.

## **Other Funding Options**

The Starkey Hearing Foundation is an international non-profit organization that provides assessment and hearing aids to disadvantaged individuals with hearing impairment globally. A main focus of the Foundation's work is to organize groups of hearing professional volunteers who travel to under-developed countries where citizens are in need of hearing assessment and hearing aids. To date, one million hearing aids have been provided to people in need across many countries. In some circumstances, individuals may apply to the Foundation for hearing aid purchase assistance.

## **What Hearing Programs and Services are Available for Seniors?**

### **Manitoba Programs and Supports**

The Deaf Centre Manitoba (DCM) Inc. is a non-profit, charitable organization which coordinates and provides resources, programs and advocacy that enhance the development of the Deaf community. The DCM operates the Deaf Resource Centre (DRC), which acts as an information clearinghouse and responds to inquiries about a diverse range of topics related to Deaf, Deaf-Blind, and individuals with hearing loss. The DRC also houses a library enabling affected individuals and other Manitobans to access information pertaining to deafness, Deaf culture, and healthy communication.

The Manitoba Chapter of the Canadian Hard of Hearing Association (CHHA) – is a volunteer-based non-profit organization linked to the national CHHA. The Association provides advocacy for the hard of hearing, self-help support and education to groups. CHHA Manitoba provides access to Sound Ideas, a newly-developed 8-module education program produced by the national CHHA which provides lip reading education and teaches strategies and coping methods to live with hearing loss. It can be made available to individuals interested in a self-learn format (DVD available to be borrowed) but is best offered in a facilitated environment (currently offered in a 10-week program every 1–2 years). The national organization has plans to train volunteers from all provinces to allow for facilitated program delivery. Also, the Manitoba CHHA has developed ‘hospital kits’ that can be used when individuals with hearing loss enter hospitals for care. Packages contain communication materials and information cards that can be given to health care providers or placed on an individual’s health record to communicate that they have hearing loss. The kits have been in use at the Health Sciences Centre for one year and have just been implemented at Seven Oaks General Hospital. There are discussions currently underway to explore expansion to the other hospitals within the WRHA.

The Central Speech and Hearing Clinic (CSHC) is an independent, not-for-profit charity established in 1989 that assists children and adults who are deaf or have hearing loss. Initially, the clinic’s services were only available to children; however, now it serves adults who require assessment and follow-up for cochlear implants. The clinic audiologists conduct hearing assessments to determine the appropriateness of a cochlear implant. Once the implant is complete, clients are seen in follow-up at the clinic to activate or adjust the external device. CSHC also offers Auditory-Verbal Therapy, which teaches individuals with hearing loss how to use technically assisted hearing to listen, to process verbal language and to speak. This program is available to all children with hearing loss but only to adults that have received a cochlear implant and provides instruction on how to listen through the implant.

The Manitoba Deaf-Blind Association (MDBA) Inc. is a community-based advocacy group whose focus is to enhance opportunities and resources for Deaf-Blind Manitobans. The Resource Centre for Manitobans who are Deaf-Blind (RCMDB) is a result of MDBA Inc.’s advocacy work. While the MDBA Inc. continues to press for enhancements in all relevant areas, the RCMDB is one of the initiatives developed to operationalize the mission and vision of the Association. The RCMDB works to enhance independence by; teaching independent living skills, providing information regarding Deaf-Blind issues and support services, and offering networking opportunities and ongoing information via newsletters. MDBA Inc. also supports E-Quality Communication Centre of Excellence Inc. (ECCOE) as a service provider for RCMDB. The ECCOE provides trained professionals (Intervenors) who act as the ears and eyes of persons who are Deaf-Blind. An Intervenor assists the person who is Deaf-Blind to communicate effectively and access information. The Centre’s website address is [www.rcmdb.mb.ca/std\\_home.html](http://www.rcmdb.mb.ca/std_home.html)

The Canadian Deafblind Association (CDBA) – Manitoba Chapter (formerly known as Intervention Manitoba Inc.) is a non-profit service provider of Supported Living homes for individuals who are congenitally Deaf-Blind. It is the function of CDBA to provide their clients the opportunity to be able to communicate with the world around them so they are able to lead a more fulfilling life in their community and be more independent in their Supported Living home. CDBA is the only service provider in Manitoba for individuals that were born Deaf-Blind. The organization’s Manitoba contact phone number is 204-949-3730.



The Disabilities Issues Office (DIO) of the Government of Manitoba was established to support and report to the Minister Responsible for Persons with Disabilities. The DIO works independently across government and coordinates policy and programs for persons with disabilities. The DIO website offers up-to-date information on disability services, policies and issues in Manitoba, along with links to other disability issues offices federally and provincially. The website address is [www.gov.mb.ca/dio/](http://www.gov.mb.ca/dio/)

The Manitoba Hearing Instrument Practitioners Association is an advocacy body for non-audiologist hearing instrument practitioners. This group's efforts have focused on lobbying for better regulation of hearing aid providers and providing information sessions to the public on hearing loss and hearing-related issues.

### **Other Provincial/National Supports and Initiatives**

The Canadian Hard of Hearing Association is a consumer-based national body that works cooperatively with professionals, service providers and government bodies, and provides information about hard of hearing issues and solutions. CHHA's goal is to increase public awareness of hearing loss and to help Canadians with hearing loss fully integrate into Canadian society. The address for their national website is [www.chha.ca/chha](http://www.chha.ca/chha)

The Hearing Foundation of Canada (THFC) is a national non-profit organization dedicated to eliminating the effects of hearing loss on Canadians by promoting prevention, early diagnosis, leading edge medical research and successful intervention. The THFC is an advocate for raising awareness of hearing-related issues among governments, media and the public. The address for their national website is [www.hearingfoundation.ca](http://www.hearingfoundation.ca)

The Canadian Hearing Society (CHS) is an Ontario-based charitable organization that offers a complete roster of essential services including; sign language interpretation and instruction, one-on-one language development for deaf and hard of hearing children, employment consulting, speech-reading training, hearing testing, hearing aids, counselling, and a complete range of communication devices. Although their services are geared to residents of Ontario, CHS's communication devices program has partnered with the Deaf Centre Manitoba (as well as organizations in Nova Scotia and Saskatchewan) to offer its extensive expertise and full range of communications devices and products to residents of other provinces. The following link provides further information and details regarding available products: [www.deafmanitoba.org/p/communication-devices-list.html](http://www.deafmanitoba.org/p/communication-devices-list.html)

## **Provincial Scan of Hearing Regulations, Services, Programs and Coverage**

The professional practice of audiologists is regulated in many provinces with the exception of; Nova Scotia, Prince Edward Island, Newfoundland, Yukon, Nunavut and Northwest Territories. Some provinces/territories without regulation may require a practicing audiologist to be a member in good standing with the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA), the Canadian Academy of Audiology (CAA) or a provincial organization.

The regulation of hearing aid dealers or hearing instrument professionals in Canada varies by province/territory in regards to existence, structure and scope. In British Columbia and Alberta, Hearing Instrument/Aid Practitioners are self-regulated through a professional college required under provincial health professions acts. Others, such as Manitoba, Saskatchewan, Quebec, Nova Scotia and Newfoundland, have acts/legislation that require a non-self-regulatory structure be in place that governs and oversees licensing and regulations for sellers of hearing aids or hearing aid practitioners. Refer to [Appendix A](#) for further details.

In regards to hearing care and services, all provinces/territories provide publically-funded audiology assessments for adults, although private audiology services are also available through many private clinics and providers. For provincial/territorial residents eligible for income assistance programs, some form of coverage for hearing aids is in place. Northwest Territories (NWT), Nunavut, the Yukon, Quebec, Ontario and Alberta have hearing aid programs in place that would be accessible to seniors. The programs in Alberta and Ontario are a cost-sharing model, while the NWT, Nunavut, Yukon and Quebec programs cover 100% of the cost. Details of provincial/territorial programs and services are provided in the table below.

Province or Territory	Hearing Programs and Services
<b>Manitoba</b>	No specific hearing aid subsidy program for seniors. Audiology services are made available throughout the province by the regional health authorities.
<b>British Columbia</b>	No specific hearing aid subsidy program for seniors. The Medical Services Plan (MSP) does not cover audiology assessments, although some adults may be eligible to receive services at the public health audiology clinic.
<b>Alberta</b>	Alberta Aids for Daily Living (AADL) Hearing Aid Program: Provides coverage for hearing aids and FM systems for Albertans who are hard of hearing. Seniors 65 and older and have low income may be eligible for funding towards two hearing aids or personal listening device every 5 years. Seniors with a higher income may be eligible for funding towards one aid/device every 5 years. AADL is a cost sharing program. Participants pay 25% of the benefit cost to a maximum of \$500 per individual or family per year. Low-income individuals and those receiving income assistance are exempt from paying the cost-sharing portion. <a href="http://www.health.alberta.ca/services/aids-to-daily-living.html">www.health.alberta.ca/services/aids-to-daily-living.html</a> Alberta Health Services provides audiology assessment services to adults.
<b>Saskatchewan</b>	No specific hearing aid subsidy program for seniors. Supplementary Health Benefit Program: Provides audiology services and hearing aids for eligible individuals receiving social services benefits. Batteries and repairs are available at no cost. The program may pay for replacement of a lost or broken hearing aid on an individual basis, but will not do so more than once in a five-year period. Replacement is subject to a 30 per cent co-payment for clients over the age of 20.

Province or Territory	Hearing Programs and Services
<b>Saskatchewan</b>	<p>Saskatchewan Health provides a full range of audiological services through the Hearing Aid Plan operated by the Regina Qu'Appelle Health Region and the Saskatoon Health Region. Services include hearing tests, hearing aids sales, hearing aid fittings, repairs, counseling, education and prevention programs. These services are available to all Saskatchewan residents and can be accessed at clinics at various locations throughout the province. Hearing aids, fittings and some repairs are provided for a reasonable cost compared to the private sector.</p>
<b>Ontario</b>	<p>Ontario Ministry of Health and Long-Term Care's Assistive Devices Program (ADP) provides funding assistance for hearing aids and FM systems to eligible clients. Any permanent resident of Ontario with a long-term physical disability who requires the use of a hearing aid for six months or longer and is not eligible for coverage under another program can apply. ADP will pay:</p> <ul style="list-style-type: none"> <li>• Unilateral hearing loss: 75% up to a maximum of \$500 of the cost of the hearing aid listed with ADP, including the earmold, and dispensing fee;</li> <li>• Bilateral hearing loss: 75% up to a maximum of \$1,000 of the cost of two hearing aids (bilateral hearing loss) listed with ADP, including earmolds, and dispensing fees;</li> <li>• FM systems: 75% up to a maximum of \$1,350 of the cost of the ADP listed device and dispensing fee.</li> </ul> <p>In addition to hearing aids and FM systems, ADP provides funding assistance toward the cost of other hearing devices such as; bone-anchored replacement sound processors, cochlear implant replacement speech processors and Teletypewriters for the Deaf (TTYs).</p> <p>For clients of Ontario Works, the program may provide coverage for the remaining 25% of the cost of the hearing aid/device if the individual does not have sufficient funds.</p> <p>The Ontario Disability Support Program may help eligible clients with; purchase of an alerting system (for example, a visual smoke alarm), repair of a hearing aid and replacement of a battery for a hearing aid or device.</p> <p>Ontario Health Insurance Program (OHIP): Insures diagnostic hearing tests ordered and performed by qualified physicians.</p>
<b>Quebec</b>	<p>Québec Hearing Aids Program: Seniors are eligible to receive a hearing aid if they are insured under the Québec Health Insurance Plan and have a hearing impairment as described by:</p> <ul style="list-style-type: none"> <li>• Persons of any age who have an average hearing loss of at least 35 decibels in their better ear; and</li> <li>• Persons of any age who, in addition to a hearing loss, have other functional limitations that hamper their integration into society, the school environment or the workplace.</li> </ul>

Province or Territory	Hearing Programs and Services
<b>Quebec</b>	<p>Services covered include; hearing aids, replacement of hearing aids (conditions apply), repairs and batteries with the initial hearing device. <a href="http://www.ramq.gouv.qc.ca/en/citizens/aid-programs/hearing-aids/Pages/hearing-aids.aspx">www.ramq.gouv.qc.ca/en/citizens/aid-programs/hearing-aids/Pages/hearing-aids.aspx</a></p> <p>Quebec Regulation respecting hearing devices and insured services: <a href="http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&amp;file=/A_29/A29R2_A.HTM">www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&amp;file=/A_29/A29R2_A.HTM</a></p> <p>Tariff for insured hearing aids and related services: <a href="http://www.prod.ramq.gouv.qc.ca/DPI/PO/Commun/PDF/Listes_AT/Listes_AT/liste_at_aides_aud_mod_2013_07_01_en.pdf">www.prod.ramq.gouv.qc.ca/DPI/PO/Commun/PDF/Listes_AT/Listes_AT/liste_at_aides_aud_mod_2013_07_01_en.pdf</a></p>
<b>Nova Scotia</b>	<p>No specific hearing aid subsidy program for seniors.</p> <p>Audiology assessments and services are provided by 15 Hearing and Speech Centres throughout the province.</p>
<b>New Brunswick</b>	<p>No specific hearing aid subsidy program for seniors.</p> <p>Department of Social Development - Health Services Hearing Aid Program: The program assists clients of this department with coverage for the purchase and maintenance of hearing aids services which are not covered by other agencies or private health insurance plans. Eligible individuals include clients of this department and their dependents, and individuals who have special health needs and who qualify for assisted health care under Section 4.4 of the Family Income Security Act and Regulations. The program covers hearing aids (once every five years), ear molds and repairs.</p> <p>Public audiology services are available through the Vitalité Health Network and Horizon Health Network.</p>
<b>Prince Edward Island</b>	<p>No specific hearing aid subsidy program for seniors.</p> <p>The Department of Community Services and Seniors: The Social Assistance Program and the Disability Support Program consider hearing aids subject to eligibility parameters and is the payer of last resort. If eligible the program(s) will pay up to \$1,500 once every 4-6 years for a hearing test, hearing aid, fitting and warranty (once assessed by an audiologist).</p> <p>Health PEI provides audiology services based in Charlottetown.</p>
<b>Newfoundland and Labrador</b>	<p>No specific hearing aid subsidy program for seniors.</p> <p>Provincial Hearing Aid Program: Individuals with low income may be eligible for hearing aid funding under this program.</p> <p>Audiology services are provided throughout the province by regional health authorities.</p>

Province or Territory	Hearing Programs and Services
<b>Northwest Territories</b>	<p>The Extended Health Benefits Seniors Program and the Extended Health Benefits for Specified Disease Conditions Program both provide coverage of reasonable charges for medically necessary supplies and equipment, including audiology equipment (e.g. hearing aids).</p> <p><a href="http://www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-seniors-program">www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-seniors-program</a></p> <p><a href="http://www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-specified-disease-conditions">www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-specified-disease-conditions</a></p> <p>Audiology services are provided to residents of the Northwest Territories by Stanton Territorial Health Authority located in Yellowknife</p>
<b>Nunavut</b>	<p>Extended Health Benefits (EHB) Full Coverage Plan for Seniors: To be eligible, an individual must be enrolled with the Nunavut Health Care Plan and be a non-beneficiary 65 years or older with no other insurance plan. EHB provides will pay the full cost of a set of hearing aids once every 5 years. <a href="http://gov.nu.ca/health/information/seniors-full-coverage-plan">http://gov.nu.ca/health/information/seniors-full-coverage-plan</a></p> <p>Audiology services are provided to residents of Nunavut and are based out of Iqaluit and Rankin Inlet.</p>
<b>Yukon</b>	<p>Extended Health Care Benefits to Seniors: Seniors 65 years of age or aged 60 and married to a living Yukon resident who is at least 65 years of age are eligible. Benefits include 100% coverage of one hearing aid or a replacement hearing aid in a four-year period. Repair and adjustment of hearing aids is allowed once every six months. Batteries are not covered. <a href="http://www.hss.gov.yk.ca/extended_care_benefits.php">http://www.hss.gov.yk.ca/extended_care_benefits.php</a></p> <p>The Hearing Services program, based in Yellowknife, provides diagnostic audiological evaluations, hearing screenings, hearing aid evaluation and dispensing, hearing aid repairs, and assistive listening devices to all ages.</p>

## What are the Gaps and Opportunities for Improving Senior's Hearing Care in Manitoba?

As a result of the review of current hearing care funding and programs available for Manitoba seniors, as well as the groups at higher risk of the consequences of hearing loss, gaps and opportunities for improvement emerged under the following areas:

### 1. Improve timely access to hearing assessment and diagnostics:

To support early recognition and treatment, there is a need to increase timely access to public audiology services. The optimal goal would be to reduce waiting times with non-urgent referrals seen within a month and emergency referrals within 24 hours. This would assist in improving seniors' access to hearing assessments through public providers.

This could be addressed through the development of an audiology workforce strategy for the province and could include:

- \* Resolution of national and provincial wage parity issues;
- \* Development of a local audiology education program (e.g. University of Manitoba Health Sciences collaborative);
- \* Development of a formal provincial audiology program and research collaborative; and
- \* Exploration of the potential to recruit and employ immigrant audiologists.

### 2. Create and fund a seniors hearing aid program:

To align with programs provided in other provinces or territories, a basic funding program for audiology devices for seniors is needed. The funding and program structure could model the Manitoba Children's Hearing Program and offer financial assistance to obtain basic hearing aids. Details of the Children's program are outlined on the Manitoba Health website [www.gov.mb.ca/health/mhsip/hearingaid.html](http://www.gov.mb.ca/health/mhsip/hearingaid.html) and include:

- Individuals requiring a hearing aid, as prescribed by an otolaryngologist or audiologist, and do not have the costs paid through other provincial or federal programs, are eligible.
- Manitoba Health will reimburse (minus \$75.00 deductible):
  - \* 80 per cent of a fixed amount for an analog device, up to a maximum of \$500 per ear,
  - \* 80 per cent of a fixed amount for a digital or analog programmable device, up to a maximum of \$1800, and
  - \* 80 per cent of a fixed amount for additional services, such as dispensing fees, ear molds, and ear impressions.
  - \* One device is allowed per ear every four years, unless there is a medically diagnosed change in the person's condition.
  - \* Items not covered;
    - Repairs, batteries, ear mold replacements, additional ear molds, or lost hearing aids
  - \* Cochlear implants – 80% coverage of external devices every 5 years.

Other suggestions to improve access to assessment, services and affordable hearing aids and devices include:

- \* Approach hearing aid manufacturers regarding bulk purchasing and pricing for basic hearing aids available through a provincial program;
- \* Development of a hearing aid recycling program (currently no capacity exists in the province); and
- \* Fund transportation to hearing assessments and follow-up appointments for individuals in remote or rural communities that require travel to a hearing care provider.

3. Implement regulation of hearing aid costs and fees:

Due to the cost discrepancies of hearing aids in Manitoba related to dispensing fees and 'bundling' of related charges (extended warranty, fitting fees, etc.), it is suggested that caps or regulations be placed around these types of costs. 'Unbundling' charges for hearing aids has a number of advantages for the consumer including:

- \* Increased product choice through customization of services to specific needs;
- \* Enhanced price competitiveness between retailers by separating device cost from service fees; and
- \* Increased transparency regarding identification of fees and services associated with hearing aid purchases.

Although not a cost or fee regulation per se, the Ontario Ministry of Health's Assistive Devices Program (ADP) mandates that all pricing must be transparent. Professionals must follow a fee guide and show all charges billed to the client. The clinic's purchase cost of the device must be listed on the invoice, along with the dispensing fee and any other chargeable services. If the dispenser is a member of the College of Audiologists and Speech-Language Pathologists of Ontario (CASLPO), the consumer cannot be charged more than the Ontario Association of Speech-Language Pathologists and Audiologists (OSLA) recommended dispensing fee listed in the OSLA Suggested Fee Schedule. If the dispenser is a member of the Association of Hearing Instrument Practitioners of Ontario (AHIP), the consumer cannot be charged more than the AHIP recommended dispensing fee listed in the AHIP Recommended Fee Guide. Additional details are available in the ADP Hearing Devices Policy and Administration Manual: [www.health.gov.on.ca/en/pro/programs/adp/publications.aspx](http://www.health.gov.on.ca/en/pro/programs/adp/publications.aspx)

4. Improve hearing supports and services:

More consistency is needed regarding customer service in the hearing aid provider industry, to include appropriate individualized advice, service and follow-up. A system navigator/ coordinator may be of assistance to seniors with hearing loss to guide timely access to services. For individuals in rural settings who have received cochlear implants, the provision of expanded follow-up care via Telehealth may reduce some of the barriers experienced by having to commute to Winnipeg for clinic follow-up appointments.

The use and availability of technology to increase services for people who are hard of hearing in public buildings could also be enhanced and could include; amplified systems, improved closed captions speed, rear caption and telecommunication technology. Examples of the latter include:

- \* The Teleloop system which allows sound to be transmitted directly from a microphone in a room to a hearing aid to allow a louder, clearer signal; and
- \* Captioned Telephone (CapTel) which is a telephone that displays every word the caller says throughout the conversation.

5. Support the provision of education programs for individuals with hearing loss:

Education and support for seniors experiencing hearing impairment is in great demand. Individual counselling services and education for newly diagnosed seniors with hearing loss is needed to provide information on; how to use hearing aids/devices, expectations of amplification, strategies to cope with hearing loss and dealing with the stigma associated with the condition.

Courses from the CHHA are available but are a limited resource as they are based on volunteer training and availability. There exists an opportunity for the private providers to work in partnership with CHHA to deliver support and education.

6. Public education/awareness:

There is also a need for education and awareness efforts directed towards the general public. This could be accomplished through multiple approaches:

- \* A public information campaign that could include the rationale and benefits of early reporting of hearing loss, the importance to address hearing loss at any age, how to access hearing assessments and available services, and what to expect from hearing providers;
- \* Provide hearing screening devices in public places, i.e. akin to blood pressure screening machines in pharmacies, etc.; and
- \* Promote Speech and Hearing Month (May) as currently, this is not widely advertised or emphasized.

7. Professional education:

Outreach for allied health professionals and services staff outside health care is also needed. General information could include the causes of hearing loss, how to intervene and services/referral sources. For health care providers, the following is recommended:

- \* Physicians and nurse practitioners: Medications and their effects on hearing loss and what information to include on audiology referrals, as this affects priority of assessment.
- \* All health care staff that provide care to seniors: The value and correct use of hearing aids and communication with individuals with hearing loss.
- \* Entry level health education programs: Education on the causes and recognition of hearing loss and the importance and value of hearing aids/devices is needed in the curriculum of health care education programs.



# VISION

Vision impairment and age-related eye changes and disease can affect an individual's financial and educational opportunities, reduce quality of life and increase the risk of injury or mortality. Presbyopia, the age-related loss of accommodation that impairs near vision due to decreased focusing ability, eventually affects everyone to some degree but generally appears around the age of 40. It tends to be evaluated and diagnosed only when an individual becomes symptomatic and presents to an eye care professional with need for near-vision correction. It has been estimated that worldwide, more than a billion adults are affected by presbyopia. As the population ages, the prevalence of presbyopia is anticipated to increase. Although studies show uncorrected presbyopia and refractive errors as one of the leading causes of disability and vision impairment (Bourne et al, 2013), it is commonly overlooked as a major source of disability and becomes problematic when individuals are not able to access or afford vision correction. While presbyopia often presents as a difficulty in reading small text, an inability to clearly see near objects can have a substantial impact on the quality of life regardless of literacy or profession.

In addition to the effects of presbyopia, the prevalence of eye-related disease (e.g. cataract, glaucoma, macular degeneration, and diabetic retinopathy) is much higher in the seniors' population compared to younger persons. These conditions are often preventable or treatable but are the result of impaired vision for many older adults. In a global meta-analysis, the three most common causes of moderate to severe vision impairment (MSVI) and blindness were found to be cataracts, uncorrected refractive error, and macular degeneration (Bourne et al, 2013). Data from that same review indicated that vision loss or impairment was more prevalent with advancing age in all countries (Stevens et al, 2013) and blindness or MSVI caused by cataracts and macular degeneration was more common in women (Bourne et al, 2013).

Regarding the Canadian perspective, in 2003 about 79% of senior men and 84% of senior women reported a vision problem of some extent, ranging from difficulty reading or watching television to more serious impairments such as being unable to see enough to drive (Millar, 2004). Most of these seniors had their difficulties corrected. Overall, only 4% of seniors had an uncorrected vision problem in 2003, a proportion that increased to 8% at age 80 or older (Statistics Canada, 2007).

In 2009, one-fifth (21%) of Canadians aged 65 to 79 years and nearly one-third (32%) of Canadians 80 years and older reported having been diagnosed with cataracts at some point, although most were able to undergo simple corrective surgery. Glaucoma is not as prevalent, but it is estimated to affect 6% of seniors aged 65 to 79 years and 13% of those aged 80 years and older. Age-related macular degeneration (AMD), a degenerative retinal disease leading to blindness, is estimated to affect 19% of Canadian seniors aged 65 to 74 years and 37% of Canadian seniors aged 75 years and older (Public Health Agency of Canada, 2010).

Loss of vision has been associated with many adverse consequences for seniors including; physical, functional and cognitive impairments, driving difficulties, falls and fall-related injuries, and social and emotional well-being, including reduced involvement in activities/recreation, depression and isolation.

In Manitoba, routine eye exams are provided by optometrists that work in the private sector. Manitoba Health provides coverage for one complete routine eye exam every two years for individuals 65 years of age and older. Exams for all ages are covered only if deemed medically necessary by a physician or optometrist. Medical eye concerns and conditions are evaluated and addressed by ophthalmologists. These are insured services included under the provincial health plan.

Vision loss or impairment due to a refractive error is primarily treated with eyeglasses or contact lenses. The Manitoba Health Eyeglasses Program provides some financial assistance towards the purchase of eyeglasses for eligible Manitoba residents who are 65 years of age and over. Vision loss or impairment related to an eye disease or condition may be treatable through medical or surgical interventions. Once vision impairment can no longer be functionally improved through corrective lenses or medical intervention, other programs and supports are available through community-based agencies.

## The Issue

### What are the Consequences of Vision Impairment for Seniors?

#### Individual Consequences

Vision impairment can have profound effects on the individual and, similar to hearing impairment, can negatively affect; physical and functional health, mental/emotional state, cognitive and social functioning and ultimately, quality of life. Specifically, the impact of bilateral vision loss has been found to be associated with increased use of community services and placement in a long-term care home (Vu et al, 2005).

#### 1. Physical functioning and health:

In a study of 5,354 Australian seniors aged 76-81 (Lopez et al, 2011), vision impairment was associated with decreased health-related quality of life and increased mortality, with no significant differences between genders. A Japanese study of 801 seniors over the age of 65 also found vision impairment was related to an elevated risk of adverse health outcomes, including mortality for both men and women (Michikawa et al, 2009).

#### 2. Functional impairment:

Vision loss can have far-reaching consequences on an individual's ability to maintain functional capacity and can impact day-to-day mobility, self-care and safety, and ultimately, the ability to live independently in their home (Rees et al, 2007; Hassell et al, 2006). For senior women, the impact of vision impairment on functional decline may be even greater. In a study by Lin and colleagues (2004), vision impairment at baseline was associated with an increased risk of functional decline in women aged 69 or older.

Specifically, vision loss can result in:

- \* Impaired mobility, such as difficulty climbing stairs (Reed-Jones et al, 2013);

- \* Difficulty providing self-care and completing activities of daily living (ADLs) and an increased reliance on others for ADLs (Reed-Jones et al, 2013; Stevenson et al, 2004; Berger and Porell, 2008; Michikawa et al, 2009);
- \* Less participation in instrumental ADLs and household activities (Alma et al, 2010; Berger and Porell, 2008);
- \* Impaired ability and avoidance of driving (Ball et al, 1998); and
- \* Nursing home placement (Vu et al, 2005).

### 3. Safety risks and concerns:

Vision loss has also been associated with safety issues for seniors (Vu et al, 2005), particularly in relation to falls and fall-related injuries, with increased injury and mortality from falls (Lopez et al, 2011). Vision loss has been linked to a higher risk for:

- \* Falls (Reed-Jones et al, 2013; Lopez et al, 2011)

Specific visual losses or conditions found to be related to fall risk factors were (Ivers et al, 1998):

- Visual acuity, contrast sensitivity and suprathreshold visual field screening was associated with falls in general;
- Visual acuity and contrast sensitivity was significantly associated with 2 or more falls; and
- Presence of posterior subcapsular cataract and use of non-miotic glaucoma medications was also associated with 2 or more falls.

- \* Hip fractures

Specific visual risk factors for hip fractures include (Ivers et al, 2000):

- Binocular visual acuity worse than 20/60;
- Poor vision in both eyes;
- Impaired or lack of depth perception;
- Not wearing glasses;
- Self-reported poor vision; and
- Increasing time since the last eye exam.

Correction of visual loss may reduce the risk of hip fracture. In a cohort of U.S. Medicare beneficiaries aged 65 years and older with a diagnosis of cataract, individuals who had cataract surgery had lower odds of hip fracture within 1 year after surgery compared with individuals who had not undergone cataract surgery (Tseng et al, 2012).

### 4. Mental/emotional functioning and health:

Loss of vision has a significant impact on emotional well-being (Vu et al, 2005; Hassell et al, 2006). Visual impairment can result in:

- \* Emotional distress (Rees et al, 2007);

- \* Increased risk of isolation (Reed-Jones et al, 2013); and
- \* Depression, including both onset and persistence of mood disorder (Chou, 2008).

#### 5. Cognitive functioning and health:

Studies have also shown an association between visual impairment and cognitive decline or dysfunction. In a study by Lin and colleagues (2004), vision impairment at baseline was associated with cognitive decline in women aged 69 years and older. In a second study, individuals aged 60-80 with visual impairment both before and after refractive correction and due to cataract, were more likely to have cognitive dysfunction (Ong et al, 2012).

The underlying mechanisms of this association between impaired cognition and visual impairment are still unclear. A common hypothesis suggests that age-related changes, such as a general decline in central nervous system function, may confound the association between visual impairment and cognitive dysfunction. An alternative hypothesis is that vision impairment affects cognitive performance by reducing the level of participation in stimulating, interactive activities and thus leads to a decrease in brain reserve and cognitive functioning. The results of longitudinal studies demonstrating that baseline poor vision predicts subsequent cognitive decline further suggest that visual impairment may be a risk factor for cognitive dysfunction (Ong et al, 2012).

#### 6. Social functioning and health:

In relation to social interaction and functioning, vision impairment has been found to result in:

- \* Reduced involvement in recreational and leisure activities, such as reading (Alma et al, 2010; Hassell et al, 2006);
- \* Less socializing (Alma et al, 2010; Rees et al, 2007); and
- \* Decreased involvement in paid or volunteer work (Alma et al, 2010).

#### 7. Quality of life:

Due to the many consequences outlined above, visual impairment and loss may adversely affect an individual's overall quality of life (Stevenson et al, 2004).

### **System and Societal Consequences**

Uncorrected visual impairment has significant implications for the individual senior but also broader consequences for the health system and society at large.

#### 1. Financial implications of falls and fall-related injuries:

As discussed previously in the [Hearing section](#), seniors' falls resulting in hip fractures have a high financial cost to the health care system. As visual impairment has been linked to falls and fall-related injuries such as hip fractures, falls prevention interventions that involve vision testing, correction of refractive and medical concerns, and functional support and education for affected individuals can result in significant savings to the health care system in relation to prevention of hip fractures.

## 2. Lost productivity to the workforce:

As individuals with vision loss tend to withdraw from paid and volunteer positions in society, support of individuals with visual impairment can contribute to the sustainability of a large, active, engaged and productive senior's population. The ability for a society to support and provide opportunities for participation (if desired) in life activities for all groups of people, including those with visual impairment, is essential to promote healthy aging and a culture of inclusion.

## 3. Determinant of health:

Social isolation and the ability to live safely in one's environment in housing that is considered safe and affordable can also be factors that contribute to a person's overall health and well-being.

## Who is at Risk for Vision Impairment?

Due to age-related changes in visual acuity with aging, seniors in general are at higher risk for the consequences of visual impairment compared to younger adults. With advancing age, there is also a higher probability of both visual and hearing impairment occurring simultaneously. However, within the senior population, there are groups that would be considered higher risk for uncorrected visual concerns.

### 1. Limited income:

In Manitoba, seniors who do not qualify for government programs that provide comprehensive financial assistance for eyeglasses or visual aids and are not able to afford private health insurance or recommended eyewear and items, are at higher risk for the consequences of visual impairment. Specifically single female seniors are considered to be an even higher-risk group within this cohort as they more often fall within the lowest income bracket.

### 2. Residents of remote and rural communities:

Individuals living in rural or remote communities in Manitoba are at higher risk due to the availability of vision assessment and services in their community and accessibility (transportation).

### 3. Dependence on others for care:

\* Cognitive impairment/dementia: In addition to the association between vision impairment and cataracts and impaired cognitive function, uncorrected vision problems can further compound communication efforts in individuals with cognitive impairment or dementia. Individuals with dementia may not be able to advocate for themselves, recognize difficulties or a decline in vision and seek help independently. Individuals without family/informal caregivers are at an even higher risk due to the lack of advocacy and support for health-related needs.

\* Residents of long-term care: When living in a person care home setting, residents are dependent on staff to recognize and screen for visual problems, and apply and remove visual aids in a timely and appropriate manner. It is also not uncommon for eye glasses to become lost or go missing in a personal care home setting.

## What are the Barriers to Accessing Vision Care?

Seniors with vision loss may experience barriers to accessing appropriate vision assessment, care and services.

### 1. Access to diagnostic services and eye care providers:

- \* Long-term care: Although some eye screening programs are available in PCHs, typically if a resident requires intervention by an eye specialist, they must be able to travel to and attend an out-patient appointment.
- \* Rural and remote communities: Some rural communities may have access to optometrists and visual care providers. However, many individuals from rural and remote communities would need to travel to obtain services and follow-up.

### 2. Financial cost of corrective eyeglasses and visual aids:

Although Manitoba has an **Eyeglasses Program** for seniors, it covers only a small portion of the cost of prescription eyeglasses. In the 2013/2014 fiscal year, 21,218 Manitoba seniors received a benefit through the Eyeglass Program with an average reimbursement of \$41 per person (V. Toews, personal communication, May 14, 2014). With declining income levels with retirement and a decrease in the number of individuals with eyeglasses coverage through private insurance, many must pay the majority of the cost of their eyeglasses and visual aids.

## Existing Programs for Seniors

### What Funding or Payment Options are Available for Senior's Vision Care?

The provision of corrective eyewear is not an insured health service provided under the Canada Health Act. Manitoba seniors have access to the Manitoba Health Eyeglasses Program, which covers a small amount of the cost of glasses. A small number of seniors may be eligible for coverage under federal or provincial programs. With the exception of these publicly funded programs, seniors have to rely, for the most part, on private insurance policies or their own financial means to cover the costs of corrective vision devices.

#### **Manitoba Funding Options**

In general terms, eye exams by an optometrist are not an insured health service unless deemed medically necessary. However, for seniors over the age of 65, Manitoba Health provides coverage for one routine eye exam every 2 years.

The **Manitoba Health Eyeglasses Program** is available to individuals who are 65 years of age and older and do not have the costs paid through other provincial or federal programs. Benefits are based on a fixed fee schedule, not on the actual amount paid for dispensing fees, frames and lenses. Details of the program can be found at [www.gov.mb.ca/health/mhsip/eyeglasses.html](http://www.gov.mb.ca/health/mhsip/eyeglasses.html) and are as follows:

- \* There is a \$50 deductible on eyeglass reimbursements. The allowable amount for dispensing fees varies from \$17.50 to \$45. The allowable amount for frames is \$18 for standard frames and \$28 for medically required frames. The allowable amount for lenses varies from \$6 to \$43.50 per lens depending on the strength of the lens. If the lenses are bifocal or trifocal, \$7.50 to \$18.50 may be added per lens.
- \* One pair of eyeglasses may be claimed every three years.

Manitoba EIA participants may receive optical supplies and services after three months of enrolment, except general assistance adults who must wait six months. Emergencies can be met during the waiting period.

In addition, the Manitoba EIA Single Grant may be available to a Manitoban at any age, where an applicant has sufficient resources to meet his or her basic monthly living costs but is unable to meet the cost of an immediate health need. This one-time grant may be issued for drug, emergency dental and optical needs, as well as medical equipment. When calculating an applicant's needs, any amounts received through other programs, such as the Manitoba Health Eyeglasses Program, are deducted from the benefit.

The Assistive Technology Support Program through the Society for Manitobans with Disabilities (SMD) provides funding assistance for people with disabilities to gain access to assistive or adaptive aids and devices to improve their daily lives.

Community service groups such as The Kinsman Club and The Lion's Foundation also have grant programs to purchase specialized or adaptive equipment for individuals with physical disabilities and limited income. The funding can assist with the cost of various assistive technologies and devices.

For Manitoba seniors with the financial means, private insurance options are available to assist in the cost of vision aids, although plans typically cover only a very small portion of the cost. As an example, Manitoba Blue Cross Plus Plan is the most economical option that provides benefits for 90% of eligible expenses of prescription eyeglasses or contact lenses as well as coverage for repairs to existing prescription eyeglasses. The maximum amount of coverage is \$100 per person, every 24 consecutive months. Monthly premiums for this plan are determined by age and for seniors would range between: Single: \$71.55-\$82.40/month; Couple: \$135.95-\$156.75/month. [www.mb.bluecross.ca/products/individual/healthanddental#](http://www.mb.bluecross.ca/products/individual/healthanddental#)

### **Federal Funding Options**

Veterans Affairs Canada provides financial assistance to qualified Veterans for vision care need through Programs of Choice (POC) 14 [Vision (Eye) Care]. VAC provides coverage for eye examinations, lenses, frames and accessories to correct sight impairments as well as low-vision aids. Examples of benefits covered include:

- Glasses
- Retinal imaging
- Regular eye exams

- Fees for low vision evaluation
- Magnifiers
- White canes

The Non-Insured Health Benefits (NIHB) program provides medical equipment, including vision aids, to First Nations and Inuit residents of Canada. Benefits are also applicable to seniors in this demographic. The following benefits are provided:

- Eye examinations every 24 months, when they are not insured by the province/territory;
- Eyeglasses that are prescribed by a vision-care provider;
- Eyeglass repairs;
- Eye prosthesis (an artificial eye); and
- Other vision care benefits depending on specific medical needs.

Detailed information on NIHB vision benefits is available at [www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/benefit-prestatiion/eye-yeux/index-eng.php](http://www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/benefit-prestatiion/eye-yeux/index-eng.php)

The Canada Revenue Agency allows for any Canadian to claim additional health expenses (including dental, vision and hearing) on their personal income tax return up to 3% of net income to a maximum of \$2,152.

### **Other Funding Options**

Lens Crafters has a payer-of-last-resort program available to individuals of all ages that are not able to afford needed corrective eyewear and are not eligible for vision coverage or insurance through any other program (including EIA and NIHB). Coverage includes one pair of eyeglasses with frames and basic single-vision or bifocal lenses. Seniors are typically referred through other agencies such as community organizations (Lion's Club) or the Canadian National Institute for the Blind (CNIB) but can self-refer by inquiring at any Lens Crafters store.

## **What Vision Programs and Services are Available for Seniors?**

### **Manitoba Supports and Initiatives**

Canadian National Institute for the Blind – CNIB Manitoba: CNIB is a registered charity that provides community-based support, knowledge and a national voice to ensure Manitobans who are blind or partially sighted have the confidence, skills and opportunities to fully participate in life. Offices are located in Winnipeg and Brandon and provide services throughout Manitoba. CNIB counsellors and specialists work with people of all ages to provide the personalized rehabilitation support individuals need to maximize their remaining vision, enhance their motivation and confidence, and promote safe and independent living. The CNIB also houses a library that provides public access to audio books and the CNIB Store offers a range of adaptive technologies and visual aids for purchase. In addition to providing community-based services and public education, the CNIB also works collaboratively with individuals who are blind or partially sighted to advocate for a barrier-free society.



The Manitoba Office website address is [www.cnib.ca/en/mb-sk/Pages/default.aspx](http://www.cnib.ca/en/mb-sk/Pages/default.aspx).

Vision Impaired Resource Network (VIRN) is a non-profit organization that delivers programs and activities that focus on providing positive experiences and information to build the confidence of people who are vision impaired to lead fully inclusive and productive lives. The VIRN community offers peer support for seniors with vision impairment. The Winnipeg & District group meets throughout the year for dinners, concerts and other activities. These gatherings offer an opportunity for seniors who are vision impaired, their families and friends to share thoughts, personal experiences and ideas in a friendly supportive environment. The VIRN website is located at [www.virn.ca](http://www.virn.ca)

The Disabilities Issues Office (DIO) of the Government of Manitoba was established to support and report to the Minister Responsible for Persons with Disabilities. The DIO works independently across government and coordinates policy and programs for persons with disabilities. The DIO website offers up-to-date information on disability services, policies and issues in Manitoba, along with links to other disability issues offices federally and provincially. The website address is [www.gov.mb.ca/dio/](http://www.gov.mb.ca/dio/)

The Misericordia Health Centre Focus on Falls Prevention Vision Screening Program is available to seniors in long-term care, acute and community settings. The program is the result of a research study and pilot project that demonstrated vision care services can reduce falls and fall-related injuries. The program offers:

- Vision screening using a reliable vision screening tool;
- Vision care, including offering optometry clinics to interested facilities;
- Vision screening education for health-care providers;
- Train-the-trainer sessions;
- Education on eye health and eye care to health-care providers; and
- Evaluation of the impact of vision care on fall and fall-related injury to facilities which have optometry clinics.

And lastly, to assist with transportation, the Winnipeg Handi-Transit program is available for individuals who have 20/200 vision or less, or a visual field of less than 20 degrees in both eyes (legally blind) that is not corrected by lenses.

## Provincial Scan of Vision Services, Programs and Coverage

All provinces/territories provide medically necessary eye care services to assess and treat eye disease to all residents under insured health services plans. All provinces/territories provide coverage to seniors for routine eye exams except; Saskatchewan, New Brunswick, Prince Edward Island and Newfoundland/Labrador. For provincial/territorial residents eligible for income assistance programs, vision assessment services (routine eye exams) and reimbursement for basic eyeglasses are typically covered.

Northwest Territories, Nunavut, the Yukon and Manitoba are the only territories and province that offer publically-funded seniors' eyeglasses programs, regardless of income. Alberta provides a publically-funded optical assistance program to eligible low to moderate-income seniors. Details of provincial/territorial programs and services are provided in the table below.

Province or Territory	Vision/Optical Programs and Services
<b>Manitoba</b>	<p>Manitoba Health Eyeglasses Program: Provides financial assistance towards the purchase of eyeglasses for eligible Manitoba residents (65 years of age and over and do not have the costs paid through other provincial or federal programs). Benefits are based on a fixed fee schedule, not on the actual amount paid for dispensing fees, frames and lenses.  <a href="http://www.gov.mb.ca/health/mhsip/eyeglasses.html">www.gov.mb.ca/health/mhsip/eyeglasses.html</a></p> <p>Insured Health Benefits: Provides one complete routine eye exam every two years for individuals 65 years of age and older. Exams for all ages are covered if deemed medically necessary by a physician or optometrist.</p>
<b>British Columbia</b>	<p>No program or coverage for eyeglasses.</p> <p>Medical Services Plan – Additional services: Provides routine eye exam every for individuals 65 years of age and older. Exams for all ages are covered if deemed medically necessary by a physician or optometrist.</p>
<b>Alberta</b>	<p>Optical Assistance for Seniors Program: For low to moderate income seniors 65 years and older, provides reimbursement to a maximum amount for prescription eyeglasses, including lenses and frames dispensed by a recognized optical provider, every three years. To be eligible for the maximum reimbursement of \$230, total household annual income must be less than \$25,800 for single seniors and \$51,600 for senior couples; for reimbursement up to \$115, income must be less than \$31,675 for single seniors and \$63,350 for senior couples.  <a href="http://www.health.alberta.ca/seniors/DOA-eligibility.html">www.health.alberta.ca/seniors/DOA-eligibility.html</a></p> <p>Health Care Insurance Plan: Provides coverage for one complete exam, one partial exam, and one diagnostic procedure per year for individuals 65 years of age and older. Exams for all ages are covered if deemed medically necessary by a physician or optometrist.</p>
<b>Saskatchewan</b>	<p>No vision care program or coverage.</p> <p>No coverage for routine eye exams by an optometrist.</p>
<b>Ontario</b>	<p>The Government of Ontario does not provide funding for prescription eye glasses.</p> <p>Ontario's Assistive Devices Program (ADP) provides assistance to individuals with long-term low vision or blindness that cannot be corrected medically, surgically or with ordinary eyeglasses or contact lenses. 75 per cent of the cost of Optical Aids (magnifiers, telescopes and specialized glasses) is covered, up to a maximum contribution.</p> <p>Ontario Health Insurance Program (OHIP): Covers eye examinations for people who are 65 years of age or older.</p>

Province or Territory	Vision/Optical Programs and Services
<b>Quebec</b>	<p>No program or coverage for eyeglasses.</p> <p>Provincial Health Insurance Plan: Eye exam coverage for; seniors aged 65 and older every 12 months; those aged 18 to 64 who are hospitalized to receive long-term care or persons in a long-term care facility; visually impaired persons of any age who are registered with an accredited centre.</p>
<b>Nova Scotia</b>	<p>No program or coverage for eyeglasses.</p> <p>Health Insurance Plan: Provides routine exam exams every 24 months for individuals 65 or older.</p>
<b>New Brunswick</b>	<p>No program or coverage for eyeglasses.</p> <p>No coverage for routine eye exams by an optometrist.</p>
<b>Prince Edward Island</b>	<p>No program or coverage for eyeglasses.</p> <p>No coverage for routine eye exams by an optometrist.</p>
<b>Newfoundland and Labrador</b>	<p>No program or coverage for eyeglasses.</p> <p>No coverage for routine eye exams by an optometrist.</p>
<b>Northwest Territories</b>	<p>Extended Health Benefits Seniors Programs: Seniors 60 years of age and older are eligible for one pair of eyeglasses every two years. Benefits include the cost of frames and standard lenses up to the defined contract maximum. This program also covers eye exams if not insured by the territory. <a href="http://www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-seniors-program">www.hss.gov.nt.ca/health/nwt-health-care-plan/extended-health-benefits-seniors-program</a></p>
<b>Nunavut</b>	<p>Seniors Health Benefit – Full Coverage Plan: Covers the cost of one eye exam, one pair of eyeglasses and one pair of eyeglass lenses every 24 months. <a href="http://gov.nu.ca/health/information/seniors-full-coverage-plan">http://gov.nu.ca/health/information/seniors-full-coverage-plan</a></p> <p>Seniors Health Benefit – Additional Coverage Plan: Pays the amount not covered by other insurance plans for one eye exam and one pair of eyeglasses every 24 months. <a href="http://gov.nu.ca/health/information/senior-additional-assistance-plan">http://gov.nu.ca/health/information/senior-additional-assistance-plan</a></p>
<b>Yukon</b>	<p>Extended Health Care Benefits to Seniors: The plan may pay for one eye examination, new lenses and a maximum of \$100.00 toward the purchase of frames once every two years. Benefits do not include the repair of glasses. The purchase of tinted or contact lenses is not covered. <a href="http://www.hss.gov.yk.ca/extended_care_benefits.php">www.hss.gov.yk.ca/extended_care_benefits.php</a></p>

## What are the Gaps and Opportunities for Improving Senior's Vision Care in Manitoba

As a result of the literature review and current vision funding, programs and services available to Manitoba seniors, as well as the groups at higher risk of the consequences of vision loss, gaps and opportunities for improvement emerged under the following areas;

### 1. Improve access and resources for vision screening and assessment of high-risk seniors:

As early recognition and subsequent intervention for vision difficulties and certain eye diseases can improve quality of life and reduce the risk of falls and fall-related fractures (Tseng et al, 2012), improving access to professional vision testing services may be an important strategy for high-risk seniors, especially those in long-term care. Although some PCH staff in Manitoba have been trained to conduct on-site screening of residents for visual impairment, nursing resources to complete these assessments are limited. An opportunity exists for this program to be considered a mandatory component and service provided in personal care homes and resourced accordingly.

### 2. Enhance funding for vision care/aids:

Although Manitoba is one of a few provinces/territories that offer an eyeglasses program to seniors, the reimbursement amounts available are only a small portion of the cost of eyeglasses, especially if bifocals or progressive lenses are required. The Manitoba program also does not provide funding or reimbursement for visual aids when vision can no longer be corrected by prescription eyewear. The following are suggestions to enhance the current program:

- \* Implement an enhanced funding and reimbursement model based on income, such as the Alberta Optical Assistance for Seniors Program;
- \* Provide funding options for optical aids when eye glasses are no longer helpful, such as the Ontario Assistive Devices Program; and

### 3. Enhance supports for independent living:

To support the principles of aging in place, enhancements to programs and services that support individuals living with vision impairment in the community are needed. Considerations include:

- \* Formalize linkages between vision support organizations, such as the CNIB, with the Age-Friendly Communities initiative to enhance community capacity to support individuals with vision impairment; and
- \* Continue to work towards the development of housing models that offer safe and affordable housing options to individuals with disabilities, including visual impairment.

4. Enhance programs and services that provide education and support to individuals with vision loss:

Support services for individuals with vision impairment and their caregivers/family members are in great demand. Although there are supports available through the charitable organizations mentioned above, the ability to meet current demand for requested resources is challenging. Additional funding is needed for more face-to-face counselling and support to individuals and their families/caregivers. There also could be an opportunity to bring individuals with vision impairment and caregivers together on a regular basis (e.g. annual conference) to discuss and share research findings, best practice, emerging trends and supports/services available.

5. Public education/awareness:

There is also a need for education and awareness efforts directed towards the general public. This could be accomplished through a public information campaign that could include; ongoing awareness of the importance of protecting one's eyes, the importance of early recognition and assessment of vision changes, how to access vision assessment and available services for individuals with vision loss.

6. Promote and support research:

There has been much research attention paid to the consequences of vision and hearing impairment in seniors. However, further studies are needed to determine whether treatment of vision and hearing impairment can decrease the risk for cognitive and functional decline.



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# APPENDIX A

## Regulation of Hearing Aid Dealers and Hearing Aid/Instrument Practitioners in Canada

	Form of Regulation		Scope and Function				
	Professional College or Body (Self-Reg.)	Act or Legislation (Not Self-Regulated)	Regulate Selling of HAs	Regulate Practice	Complaint Mgmt. Process	Outline Defined/Reserved Acts	Register of Members
<b>Manitoba Hearing Aid Act</b>		✓	✓	✓ (Private providers)	✓		
<b>British Columbia Health Professional Act</b>	✓			✓	✓	✓	✓
<b>Alberta Health Profession Act – Hearing Aid Practitioner Profession Regulation</b>	✓			✓	✓	✓	✓
<b>Saskatchewan Hearing Aid Sales and Services Act</b>		✓	✓		✓		
<b>Quebec Hearing Aid Acousticians Act</b>		✓	✓			✓	
<b>Nova Scotia Direct Sellers Regulation Act</b>		✓	✓				
<b>Newfoundland/Labrador Hearing Aid Practitioners Act</b>		✓		✓	✓	✓	✓
<b>Ontario, Yukon, Northwest Territories, Nunavut, New Brunswick and PEI</b>	No regulation or legislation for hearing aid dealers or hearing instrument practitioners.						



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