THE CANADIAN DENTAL HYGIENISTS ASSOCIATION
L'ASSOCIATION CANADIENNE DES HYGIÉNISTES DENTAIRES

Delphic Research
June 2022

# A National Oral Health Care Plan for Canadian Seniors

## Making Progress Towards a Vision of Oral Health For All

**A Policy Paper**


THE CANADIAN DENTAL
HYGIENISTS ASSOCIATION

L'ASSOCIATION CANADIENNE
DES HYGIÉNISTES DENTAIRES

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## LETTER FROM THE PRESIDENT OF CDHA

As Canadians, we take pride in our universal health care system because we collectively recognize that proper access to health care is vital. And while it is true that our health care system is world class, it isn't perfect.

Oral care is health care. Oral diseases are associated with various systemic health conditions such as diabetes, respiratory, and cardiovascular diseases as bacteria from the mouth can enter the body through the bloodstream and airways. When oral diseases aren't addressed early, Canadians often find themselves in doctors' offices and hospitals, costing our health care system an estimated $1 billion annually in avoidable expenses. As essential members of the oral health care team, dental hygienists have been at the forefront of advocating for prevention as an oral health care strategy. We are often the first health professional a person sees when they enter a dental or dental hygiene clinic, and we typically spend more time with them than the dentist. While the regulations governing dental hygienists vary from province to province, one thing is clear: dental hygienists, working independently or as part of oral health care teams, play a vital role in preventing oral diseases and in helping Canadians maintain a healthy mouth.

Dental hygienists across Canada are acutely aware that our publicly funded health care system does not reflect how crucial oral health is to overall health. Only 6 percent of Canada's national dental expenditure is government funded — the second lowest rate world-wide among high-income countries.

Seniors, who often have trouble accessing vital oral health services, are especially vulnerable. Many older Canadians forego dental appointments and treatments because of cost alone, and issues surrounding geographical access and mobility only compound the situation.

It is inspiring to me that our association and dental hygienists across Canada are committed to driving change, calling for action from elected officials and policy makers at all levels. It's time to close the gaps that prevent lower-income seniors and seniors living in long-term care homes from accessing the oral health care that they need. As primary health care professionals, dental hygienists know how important oral health is and how crucial preventive care is for the well-being of our clients. As Canadians, we are disheartened and concerned by the failure to recognize oral health care as a critical part of the publicly funded health care system. It is time to make oral health a health priority and to establish a pan-Canadian plan to ensure that all Canadians, starting with the most vulnerable among us, have access to this care.

When it comes to supporting the oral health of our seniors, Canadians are united behind us. A recent Abacus survey found that 86% of respondents support federal funding to support low-income seniors.

The board of directors, staff, and members of the Canadian Dental Hygienists Association look forward to working collaboratively with health system leaders across the country to improve the health of Canadian seniors.

Sincerely,

Wendy Stewart,
President
Canadian Dental Hygienists Association

## EXECUTIVE SUMMARY

Ensuring access to good oral health care for all Canadians should be an important priority for government, just as access to other health services are viewed as important priorities. Nonetheless, significant inequities exist around access and outcomes when it comes to oral health services, particularly for our most vulnerable populations. Over the years, the call for improved oral health services has grown louder and, finally, governments have started to pay more attention. In recent years, some provinces have moved forward with new programs to expand care to the most vulnerable, including new programs for seniors living in poverty. While progress is welcomed, the reach and impact of oral health programs have been extremely limited and, moreover, the benefits of progress have not been shared equally across the country. It's time for governments to come together and work towards a pan-Canadian framework to expand access to oral health services and address oral health inequities.

In late fall of 2019, the federal government made a commitment in the Speech from the Throne to explore universal dental care. This was followed by a request in the Minister of Health's mandate letter to "Work with Parliament to study and analyze the possibility of national dental care." (Dec 13, 2019). The movement of the federal government recognizing the importance of oral health care to overall health was encouraging.

A few months after this announcement, the world changed. The economic and social impact of the COVID-19 pandemic has reshaped the capacity of government to support critical health issues, like the oral health of Canadians.

The Canadian Dental Hygienists Association (CDHA) is the collective national voice of over 30,000 dental hygienists in Canada, directly representing over 20,000 members, including students. CDHA has been advocating for many years to influence the national public policy environment to improve access to oral healthcare for Canadians. The pandemic has not halted this work, but we recognize and appreciate the capacity of the government to support new large-scale health initiatives during this time.

This policy paper sets out key, evidence-based recommendations, to support the oral health of the population that has been hardest hit throughout this pandemic – Canada's vulnerable seniors. This policy paper calls on the federal government to work with provincial and territorial governments, as well as provide funding, to support the expansion of publicly funded oral health services to lower income seniors on a pan-Canadian basis.

## KEY RECOMMENDATION:

We recommend that the Government of Canada commit to provide $2 billion over five years to provincial/territorial governments to deliver a pan-Canadian oral health program for seniors.

By taking action to advance the oral health of seniors, governments can help close the gap with respect to an important population for whom health inequities remain an issue. While it may not address every gap that currently exists, the approach outlined herein is achievable in the near term and targets a vulnerable population in need. If implemented as recommended, a new pan-Canadian approach to coverage for low-income seniors could provide access to hundreds of thousands more Canadian seniors who face barriers accessing the care they need to maintain their oral health, as well as their overall health.

## INTRODUCTION & PURPOSE

The Canadian Dental Hygienists Association commissioned this paper as part of its ongoing advocacy to promote policies that will advance better oral health outcomes for all Canadians. As leaders on the frontlines of oral health care and service providers to millions of Canadians in every part of the country, Canada's dental hygienists know first-hand the importance of good oral and overall health.

Dental hygienists are primary oral health care professionals who provide clinical assessments and therapy to prevent and treat oral conditions and diseases. They also offer oral health education and health promotion strategies to people of all ages. As the sixth largest regulated health profession in Canada, dental hygiene draws on a growing body of knowledge to guide clinical practice and support clients in making evidence-informed decisions regarding their oral health. Dental hygienists are educated at universities and colleges across Canada. To practice in Canada, dental hygienists must be registered or licensed by the appropriate regulatory body in their respective province or territory. Dental hygienists work in a variety of settings such as dental offices, dental specialty practices, public health, independent dental hygiene practices* (e.g., without the supervision of dentists and typically in non-traditional office settings such as stand-alone dental hygiene clinics, mobile practices, and long-term care homes), community health centres, and hospitals. Beyond clinical practice, many dental hygienists have roles in education, health promotion, research, and administration.

This policy paper was commissioned to inform and support public policy discussions on the essential aspects of a public oral health care program for Canada's most vulnerable populations, with a focus on vulnerable seniors. There is significant research that supports the oral-systemic link, the importance of good oral health, and the impacts on overall health. Oral health is intimately related to overall health and consequently, poor oral health is intimately connected to the cycle of poverty and lack of access to care.

## METHODOLOGY

The project was led and managed by a team from Delphic Research Group that included experts in health care policy, health system design, dentistry, and public administration. Delphic Research's project team worked closely with CDHA to ensure alignment of priorities and objectives.

In addition to the support of CDHA staff leadership, a project advisory committee of eight leading oral health professionals from across Canada provided guidance and advice to the project team on key points during the process, meeting four times during the project, as well as providing additional input on an individual basis by email and in interviews.

### Mandate

The project team had been asked to focus on the question of how the federal government could take leadership to ensure the creation of a national oral health care plan that would provide coverage to vulnerable populations with a specific request to look at the working poor and low-income seniors. The team was also asked to consider the various factors that might create obstacles or challenges in government acting on any recommendations being considered.

Given government's inaction on stakeholder and expert recommendations for oral health care in the past, the clear intent was to take the steps to understand – from the government's own perspective – the range of constraints and limitations that define the boundaries of what government can realistically achieve. It would not be sufficient to recommend the solution most likely to address the problem of unmet needs or to ensure adherence to a philosophical principle or societal value if that solution was, for any practical purpose, unimplementable.

Given this dimension, the development of the policy paper needed to not only conduct a thorough needs assessment to identify gaps between current and desired state, but also one that pursued the path of policy analysis, considering the various historical, constitutional, fiscal, and resource dimensions that this entails.

**Research Process**

To begin this process, an initial survey of the available academic and grey literature was conducted. This was used to map the landscape from both clinical and policy perspectives, providing the project team with enough information to establish core facts about the state of oral health care in Canada, the value to individuals and to society, as well as the kinds of considerations – political, legal/constitutional, fiscal etc. – that all governments must weigh in when making major policy decisions.

The initial literature review involved 51 peer-reviewed journal articles, 85 grey literature sources, as well as a variety of other media, covering a wide range of topics that, together, needed to be considered. With the help of the advisory committee, topics to be included for the literature search were developed. They included the following:

- the impact of unattended oral health issues on individuals and on health systems;
- the evolution of oral health care coverage in the context of the development of Canada's universal health insurance system;
- federal, provincial, territorial, municipal, and public health dental programs, and their approach to coverage;
- the role of private payment and public health insurance in accessing oral health care;
- coverage gaps for vulnerable populations and the impact these gaps create;
- the social determinants of health in Canada;
- how Canada's oral health care strategy compares in (1) outcomes and (2) approach with other developed countries;
- the evolution and current scope of education and training of oral health professionals across jurisdictions; and
- federal-provincial-territorial relations and agreements in areas of shared priorities in healthcare

To complement the literature review, the team conducted 19 key informant interviews. Key informants included oral health and public health professionals, long-term care experts, public policy academics, health/life sciences academics, clinical educators, and individuals who interact with vulnerable populations from across Canada. These interviews not only explored core questions associated with understanding the unmet needs and their consequences, but also asked the key informants why they believed there had been little progress, despite well-

documented needs. The key informants came from every part of the country – from British Columbia in the West to Nova Scotia in the East, as well as the prairies, Ontario, and Quebec – as well from rural, remote and northern communities.

In addition to what was found in the literature, the project team also accessed related publicly available data to complete the picture with respect to Canadians' access to oral health care, sources of benefits coverage, the degree to which vulnerable Canadians are taking the steps recommended to maintain good oral health, and factors and barriers influencing Canadians' decisions around engaging in healthy behaviours when it comes to their oral health (such as the impact of cost on seeking preventive oral care and accessibility to oral health care).

The review also catalogued an inventory of current programs and coverage options with a focus on understanding where coverage gaps exist, both in terms of populations and services available, as well as how those gaps would affect the vulnerable populations.

**Gap Analysis**

A gap analysis was conducted to consider the impact of current policies on vulnerable populations in terms of access and outcomes, with a focus on the impact of coverage as the primary frame. While there are myriad of factors and policies that may have an impact on access to oral health services and outcomes (and some of these are discussed in the paper), the focus was on the impact of policies around oral health coverage.

Looking through the comparative lens of a "desired state vs future state," the gap analysis assessed the effectiveness of current programs across the country in achieving equitable access to oral health care. This gap analysis was used to target our recommendations to those for which there was a delta between the current state and desired state, as well as to examine where that unmet need may result in the potential for the greatest negative consequences.

**Political and Other Constraints**

It's been said that "politics is the art of the possible." The policy paper recommendations were framed with this idea in mind by engaging in a set of activities that attempted to understand what is possible through the eyes of those who ultimately will need to make that determination.

Good policy is more than just having a vision for the future that brings a functional solution to address a real need; it must also be implementable. The better a policy recommendation fits within the existing legal, political, economic, and historical context, the less resistance it will face. On the other hand, policy recommendations that stretch the limitations of the fiscal capacity of the state, are not mindful of constitutional limitations or represent a radical break from established ways of doing things, will introduce additional obstacles that will each need to be overcome.

In consideration of this reality, part of the strategy in developing the final recommendations was to work to clear as many obstacles as possible from the path of progress towards implementation.

To that end, the project team engaged in a process of understanding the greatest potential limitations and constraints faced by government itself and examine potential recommendations in that light. In short, this policy paper set out to remove – to the extent possible – all the reasons government might have to say "no" or "not now." That process took into consideration the fiscal, legal, and system capacity constraints, as well as the expectations and realities faced by government.

Looking at the same question through a different lens, the project team reviewed specific examples where the federal government took the initiative to drive pan-Canadian agreement towards provincial investment and program implementation based on shared priorities. Examples include a review of the process and outcomes of the 2004 Health Accord, the 2017 agreements on home and community care and mental health, the 2021 agreements around the Long-Term Care Fund, and the recent bilateral agreements on childcare between the federal and provincial/territorial governments.

Finally, the project team examined what politicians themselves have been saying. Not surprisingly, years of advocacy and discussion on the subject had also left a record in the political debate with government leaders, political parties, and individual legislators making statements which were useful in understanding the political realities at play. Of note, during the course of this project, members of the House of Commons in the 43rd Parliament engaged in a debate on NDP (New Democratic Party) MP (Member of Parliament) Jack Harris' motion on a federal dental care plan for families earning $90,000 or less and who did not have dental coverage.

While the motion was defeated, the debate which took place on May 4 and June 15, 2021, in the House of Commons, provided a useful perspective in understanding parliamentarians' views on the issue and the barriers to progress.

**Stakeholder Analysis**

The project also recognized the importance other stakeholder perspectives play in shaping policy and in their ability to influence how decision-makers may perceive any policy recommendations put forward by others.

The oral health care community has long been an active voice advocating for better public policy benefiting Canadians. Consequently, stakeholders have published a wealth of position papers, research findings, and recommendations dedicated to improving Canadians' access to oral health care.

To aid in the understanding of stakeholders, the project team reviewed relevant material from several organizations who have been advocating for improved access to oral health care, including the Canadian Dental Hygienists Association (CDHA), the Canadian Association of Public Health Dentistry (CAPHD), the Canadian Dental Association (CDA), the Denturists Association of Canada (DAC), the Canadian Dental Assistants Association (CDAA), the Canadian Association of Emergency Room Physicians (CAEP), the Canadian Public Health Association (CPHA), Canadian Doctors for Medicare, and the Canadian Academy of Health Sciences. Their contributions to the debate have provided a wealth of evidence to support expansion of publicly funded oral health services to more Canadians.

## A PAN-CANADIAN ORAL HEALTH PLAN FOR CANADA'S SENIORS

This paper calls on governments to work together to develop and implement a pan-Canadian approach to oral health coverage for lower-income seniors, age 65 and older.

CDHA, dental hygienists, and the entire oral health community wish to see equitable access to oral health services for all Canadians, regardless of where they might live or their income. It is time to start investing in oral health services, ensuring that vulnerable populations who currently lack access to dental insurance coverage or quality publicly funded programs have options for oral health care available to them.

Ensuring that all Canadians have access to high quality oral health care should be a high priority for everyone. However, this paper recognizes that governments and health systems alike face limitations on how quickly coverage gaps can be addressed to achieve that goal. For one, the fiscal capacity of governments to undertake significant investments in new programs is a major consideration for policy makers, particularly in the context of competing priorities in healthcare spending. As one would expect, the policy approval and appropriations processes of government demand careful examination of the cost-effectiveness and impact of new programs, which can favour those initiatives which are well-targeted to those with the greatest need or where there is the greatest potential return on investment. Naturally, political considerations can play a role in tilting favour towards programs that support a politically important constituency or group, but the machinery of government does ensure that a robust analysis is an integral part of the picture.

Another key consideration is the other resources needed to implement a new program and, in particular, the human resources. Indeed, one of the principal reasons cited for oral health care not having been included in Canadian medicare from the outset was the lack of sufficient oral health providers to deliver the care.(1) Where there has been a great deal of progress in growing the oral health professional workforce, the degree to which Canada has sufficient dentists, dental hygienists, dental therapists, denturists, and other trained personnel to meet the care gap is a factor that governments must consider and address as part of any plan to expand oral health care coverage.(1)

This paper also takes into account another important consideration, that of Canada's federal system and the recognition of health care generally as a matter of provincial jurisdiction. That being said, the recommendations included in this paper also recognize the important role that the federal government has played in supporting the development of a pan-Canadian framework around shared health priorities from coast-to-coast and the role that federal transfers to provincial/territorial jurisdictions have played in bringing all parties to the table in the common interest of Canadians.

**An Important Step Forward**

It is true that years of underinvestment by government cannot all be addressed at once, particularly in light of competing priorities. However, that does not mean that governments can't move forward now to begin to close the gap in accessing care for at least some vulnerable populations. To that end, this paper proposes that governments immediately work to first close the access gap for lower-income seniors, ensuring that all lower income seniors 65 or over have equitable access to oral health care services.

In this regard, it is recommended that the federal government provide $2 billion over five years towards provincial/territorial plans that ensure that Canadian seniors, wherever they might live would have access to a basket of preventive and basic oral care services intended to maintain good oral health and, consequently, better overall health.

As has been seen through numerous examples, in the past, federal leadership and federal funding have been important factors in achieving pan-Canadian progress on shared national priorities with their provincial and territorial partners in Confederation. Indeed, federal participation and federal funding transfers have been a critical catalyst to progress when it comes to expanding healthcare services on an equitable basis to Canadians, wherever in the country they might live.

Once again, the federal government can play a leading role in convening these discussions across provinces and territories, unifying a patchwork of public programs with the ultimate goal of improving seniors' access to oral health care across the country. The federal government's commitment to funding improvements and working collaboratively in setting minimum pan-Canadian requirements for provincial/territorial oral health care programs for lower income seniors is critical in delivering quality care across the country.

In this regard, governments could consider engaging the Pan-Canadian Public Health Network through the Federal/Provincial/Territorial Dental Group, which includes representatives from all 10 provinces, three territories and at the federal level.

We also recognize that funding isn't the only factor limiting the pace of progress. Governments and leaders in oral health must also consider the need to expand the capacity of our oral health system so that it can deliver more care to more people. This will require careful planning by government and system leaders, working alongside organizations like the CDHA, other national and provincial oral health organizations, and all oral health care professionals.

To this end, this paper also recommends that agreements between provinces and territories and the federal government include a clear commitment to the development of strategies, plans, and performance metrics by each jurisdiction, with a public reporting mechanism on progress. Among other things, it is recommended that these plans consider the importance of health human resource and infrastructure planning, the locations, and settings where vulnerable seniors are in need of care, as well as their intentions to implement, direct, and coordinate health promotion activities such as:

- Building healthy public policy for better oral health;
- Creating supportive environments for patients/clients and care providers;
- Strengthening community action;
- Develop personal oral health knowledge and skills;
- Advancing greater integration of oral health services and professionals within broader care settings, particularly in long term care;
- Integration of on-site oral health care facilities and services; and,
- Building a growing knowledge base of information and data when it comes to understanding the oral health of Canadians.

## WHY A SENIORS-FIRST APPROACH

**Summary of Recommendations**

That the Government of Canada commit to provide $2 billion over five years to provincial/territorial governments in exchange for their commitment to recognize oral health care as a shared health priority.

It is further recommended that provincial and territorial governments each work towards agreements with the Government of Canada that commits to achieving the following:

- Implementation of a pan-Canadian oral health program for lower income seniors administered by provincial/territorial jurisdictions, based on strategies and plans developed in collaboration with experts and oral health stakeholders;
- An agreement with respect to the development of indicators that will be tracked and reported publicly to measure progress on oral health status, access, etc. to be developed by government along with leaders in oral health;
- Annual public reporting on progress achieved on the key indicators and implementation milestones.

While there are a number of populations in Canadian society that face barriers to access to care, seniors are an especially vulnerable group when it comes to maintaining good oral health, facing unique challenges from the rest of the population. In the face of the global pandemic, maintaining good oral health has become even more challenging and underscores the importance of removing barriers that stand in the way of seniors accessing oral health care.

As seniors retire, many of them lose whatever oral health coverage they had through their employers and suddenly find themselves without the means to continue to access those services which helped them maintain good oral health throughout their adult lives. Indeed, Canadian seniors are almost twice as likely to be without insurance than those under 65.

As this paper will outline, there are particular reasons why oral health for seniors is so important and why they are especially vulnerable when faced with barriers to access oral health care. For example, the burden of chronic disease and the relationship between oral health care and their risk factors and outcomes underscores how serious the potential risks are for seniors when they are not able to access oral health services.

We also see how seniors who are not married or living common-law are less likely to visit an oral health provider or follow-through on recommended treatment as a result of cost. However, this compound effect is most pronounced in seniors with lower incomes: access to dental care is worse across various indicators for those with lower incomes. The impact of this presents itself in data indicating that seniors who face cost-related barriers have, on average, teeth three times more decayed teeth than their counterparts.(2)

Finally, in 2019, a detailed health economic study by the Canadian Centre for Health Economics found that a program targeting low-income senior's population with basic care would meet the threshold of "cost effective". Indeed, when comparing cost effectiveness between various senior's programs and those focused on providing coverage to those on social assistance, senior's programs were found to be 5-7 times more cost effective, particularly when one considers the systemic disease impact.(2) If government wanted to optimize value for money, a program targeting vulnerable seniors has a strong economic case.(3)

**COVID-19 and the Disproportionate Burden Placed on Seniors**

There is one other reason why this paper argues that a seniors' program should represent the next step in expanding access to oral health services. The pandemic has significantly changed Canadians' way of life, but it has particularly shone light on the vulnerability of seniors during times of crisis.

We know that lower income seniors face issues accessing oral health services in the best of times. However, these issues were exacerbated by the pandemic, which further created access issues of their own.

A 2021 study by Statistics Canada found that seniors have borne a disproportionate burden of the COVID-19 pandemic, representing 64% of excess death and 93% of deaths attributed to the virus during the first 15 months of the

pandemic.(4,5) In addition to far higher mortality rates, the pandemic has also significantly impacted the quality of life for our seniors as one of the highest risk demographics of serious illness, leading to sweeping changes to their way of life, especially through social isolation.

The study found that seniors also were more cautious than the risk-tolerant young, and governments across the country were slow to respond with comprehensive plan to protect seniors in vulnerable circumstances such as those living in congregate settings.

The challenges of supporting Canadian seniors during public health crises has made it apparent that seniors require unique, comprehensive access to primary care, including oral health care. Given seniors' higher risk to comorbid illnesses, oral health plays a critical part in the holistic whole-of-body approach to overall health to protect seniors across Canada.

## WHY GOVERNMENTS SHOULD VIEW ORAL HEALTH AS A POLICY PRIORITY

While this policy paper is prioritizing an oral health care plan for low-income seniors, it is important to emphasize the value of ensuring all Canadians have access to quality oral health services and prevention.

When we think of our oral health, we tend to think of the health of our teeth, gums, and the structures that help us eat, speak, and smile. But more than that, as the World Health Organization (WHO) put it, "oral health is also a key indicator of overall health, well-being and quality of life".(6)

Oral health is a growing global priority. In 2021, delegates to the World Health Assembly of the WHO passed a historic resolution asking member states, Canada among them, to address key risk factors of oral diseases, enhance the capacity of oral health professionals, and give greater priority to prevention strategies that include access to preventive care services. With so many oral health conditions being preventable if treated during preliminary stages, establishing better access to oral health care is gathering support around the globe.

### The Mouth-Body Connection

Many of us may have experienced what it is like to have an issue emerge in our mouth or with our teeth. Pain and discomfort are the things most associated with oral health problems, along with the potential for dental caries, tooth loss, oral infection, and periodontal (gum) disease.

These problems within our mouths can be quite serious. One consequence of poor oral health is the body's ability to get proper nutrition due to difficulty chewing and swallowing. Poor oral health – which may result in, for example, tooth loss and an altered appearance -- may also lead to embarrassment and social withdrawal, which can have a serious impact on one's social well-being, mental health, and quality of life.

But the issues extend far beyond the mouth. There is a growing body of literature establishing the connection between oral infections and other diseases in the body; in particular, mounting scientific evidence points to both periodontal disease and dental caries as contributing factors to many serious general health conditions.(7,8)

Oral diseases are also often associated with a number of systemic health conditions, such as diseases of the heart and lungs, diabetes, and adverse pregnancy outcomes.(8–10) Organ systems, such as the digestive or nervous systems, coordinate with one another to maintain balance within the human body; these systems are interdependent, oftentimes with the same organs supporting different organ systems. Consequently, impacts to one part of the body can have cascading consequences to other parts of the body. (11)

Bacteria from oral diseases can travel and infect other parts of the body by entering through the bloodstream or airways.(7) Such microorganisms have the potential to worsen or increase the risk of other health problems such as heart disease, stroke, and respiratory diseases.(7,10) Pathogens that cause chronic bacterial infections can enter below the gumline and make their way into the bloodstream through bleeding gums. (12) Periodontal disease has been strongly tied to heart disease and difficulty in controlling diabetes. Alzheimer's may also develop in tandem with periodontal disease, which affects half of adults over the age of 30. (8) Though the links to Alzheimer's are less well established, evidence is accumulating. (13)

Moreover, oral diseases often share similar risk factors with several chronic health conditions such as obesity, diabetes, heart disease, stroke, and cancer. Common key risk factors include a poor diet, smoking, and increased alcohol use. Poor diet may lead to compromised dentition but also contributes to obesity and, in many cases, to diabetes and cardiovascular diseases. Smoking results in poor gingival and periodontal health, as well as oral or lung cancer. Excessive alcohol consumption also increases the risk of oral cancer and liver problems.

**The Power of Preventive Care: Optimizing Outcomes, Optimizing Health**

The consequences of poor oral health can be significant, but that doesn't mean that they are unavoidable. By adopting healthier behaviours and through regular visits to an oral healthcare provider, much can be done to maintain good oral health and prevent the potential for serious problems in the mouth, as well as help decrease the likelihood of developing serious chronic diseases, something of particular concern to the growing number of Canadian seniors.

Canadians largely understand and accept that the issues that may develop in our mouths, such as dental caries and periodontal disease, are largely preventable by adopting healthy habits and through regular access to preventive oral health

services provided by a qualified oral health professional. These simple measures have long been established as highly effective at helping to avoid issues altogether or, at the very least, help to resolve issues if detected early on.

> "Regular maintenance of one's oral health by a dental hygienist, is important for keeping the mouth and body healthy, yet too many Canadians are without professional oral care. This needs to change."

A qualified oral health provider, such as a dental hygienist, can assess the mouth and its structure, develop a personalized care plan, provide support and instruction about the daily oral self-care protocols that individuals can follow to ensure a good state of oral health is maintained, and provide preventive and interceptive treatments to treat or control oral diseases.

Regular brushing and cleaning between teeth are measures that will prevent the accumulation of debris (soft plaque biofilm) and calculus (hard material, otherwise known as tartar) on the teeth.

While the presence of plaque biofilm and calculus are not indicators of disease itself, they are well-established as contributing factors that increase the risk for gingivitis that involves inflammation of the gums, that if left untreated, can lead to periodontitis which includes loss of supporting structure and bone around the affected teeth that could also lead to tooth loss and other more serious problems. (2) Plaque biofilm and calculus accumulation can be prevented through regular brushing and flossing. However, once calculus forms it can only be removed by a qualified oral health professional.

Maintenance of good oral health is a lifelong endeavour; at every stage of life, it is an essential cornerstone to our overall health, well-being, quality of life, and positive self-image. Early childhood visits to the dental office are proven to be effective in reducing the need for restorative treatments such as fillings later in life.(14)

These visits also allow for providing targeted oral health education, such as demonstration of proper oral hygiene practices, implementation of crucial caries prevention measures and reinforcing the importance of regular oral health visits throughout the entire life cycle. As we age, our susceptibility to oral health issues, like dental caries and periodontal disease, increases due to other risk factors such as diet, receding gingiva, dry mouth related to medications or disease, physical and cognitive disabilities, to name a few.

Nutrition and a healthy diet are also important factors to maintaining a healthy mouth and body. The food that we consume provides our bodies with the nutrients required to fight infections and diseases, as well as renewing the tissues in our gums and teeth. With the prevalence of starch and sugars in our diets today, the risk for dental caries is elevated due to the resulting increase in acid production in the mouth.

Many studies have also been conducted on the positive effects of fluoride and its ability to prevent or reverse dental caries. Water fluoridation is defined as adjusting the levels of fluoride in public drinking water supply to optimize the prevention of dental caries. Fluoridation of community water has been touted as a safe, effective, and inexpensive method to prevent dental caries. (15) Adults who receive a lifelong exposure to fluoridated water experience a 20-40 per cent decrease in dental caries. However, fluoridated water is not guaranteed for all Canadians; as of 2017, only 38.7 per cent of Canadians had access to fluoridated water. (16)

**Canadians Are Not Fully Benefiting from Prevention**

Although the benefits of prevention are well-documented and straightforward to deliver, Canadians are falling short of meeting even some of the most basic requirements for prevention. Just three out of four Canadians report visiting an oral health professional regularly. As for adopting healthy preventive habits at home, just 78.3% reported brushing their teeth twice daily and less than half (43%) reported flossing their teeth as least once per day. (2)

Health impacts for those who neglect their oral health range from discomfort, tooth loss, bad breath, to difficulties chewing and swallowing. (17) More severely, dental caries and periodontal disease may contribute to serious chronic health conditions and increase the risk of heart disease, stroke, diabetes, and respiratory diseases. (18) We also know that visible signs of poor oral health, such as dental caries, broken or missing teeth, can have negative social consequences like social isolation, difficulty eating and swallowing, which compounds vulnerable groups' negative health outcomes.

This can be seen in our oral health outcomes. An incredible 96% of Canadian adults have had at least one dental caries, the same percentage as in 1972; having dental caries represents the single most common preventable disease in Canada. (2)

But it is not just dental caries that stand out; periodontal disease also represents a major problem for many Canadians and is largely preventable. One out of every three Canadians have or have had gingivitis and 21 percent of adults with natural teeth have had "moderate or severe" periodontal problems. (2) Incidentally, the data shows a strong correlation between periodontal disease and whether or not a person has seen an oral health professional: 48 percent of adults with gingivitis had not visited an oral health professional in the past year. (2)

When surveyed, 12 percent of adults report that they had ongoing pain in their mouth in the previous year, and the same percentage say that they have avoided certain foods as result of a condition that has formed in their mouths. (2)

**Impact on Health Care Utilization**

When problems do occur, these people are more likely to find themselves in a hospital or doctor's office than a dentist's office. According to a 2017 study, patients seeking treatment for dental pain visited a doctor's office every three minutes and emergency departments every nine minutes. (19) Remarkably, it has been estimated that one out of every 100 emergency room visits are for dental complaints, primarily from low-income adults without access to an oral health provider. (20)

In Ontario, the estimated costs to the health system of these visits range from $16-31 million annually. (20) Between 2011 and 2015, there was a yearly average of 27,800 visits to Alberta's emergency rooms for dental reasons, costing the system up to $6.2 million annually. (20) British Columbia also saw a high usage of emergency rooms for dental reasons; between 2013-2014, BC saw 12,357 visits to the ER with a $124 cost estimate per visit for a total estimated cost of $1.54 million in direct costs alone.(20)

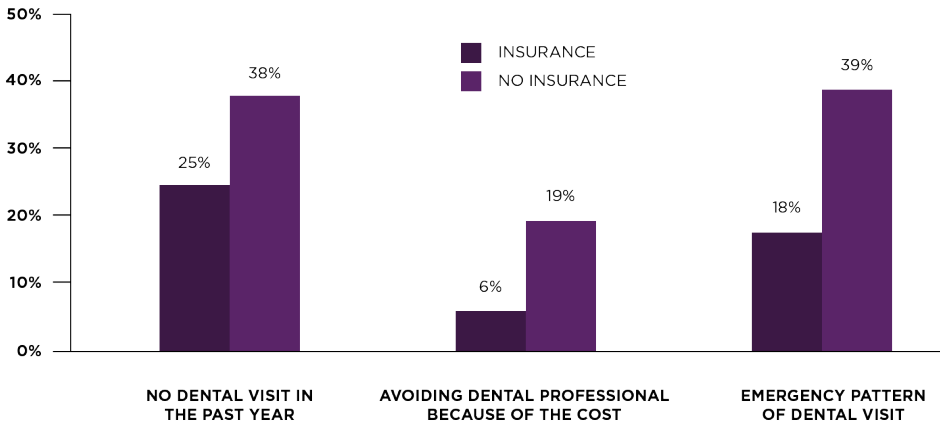
Not only does this cost our healthcare system with avoidable visits, but they are not the right place for these people to get appropriate oral health care. For example, 70% of Emergency Room (ER) patients with oral health related issues were working adults; 98% of them were seen and discharged within a 2-hour timeframe. (20) Due to the non-urgent nature of their conditions, the majority were discharged back out into the community without being provided any treatment.

Hospital emergency departments are a poor substitute for a dentist office or seeing a qualified oral health provider. Hospital emergency rooms lack the proper equipment to provide effective dental treatments, and physicians covering the ER are also not adequately trained to carry out dental procedures. Many of these visits would be avoidable if proper preventive oral care measures were taken by an oral health care provider during regular visits, as well as by individuals engaging in healthy behaviours that support the maintenance of good oral health.

These emergency room visits are almost entirely avoidable, just like many of the consequences of poor oral health and lack of appropriate access to oral care.

## INSURANCE AND ACCESS TO ORAL HEALTH CARE AMONG THE ELDERLY (4)

Data shows that seniors without insurance are more likely to avoid visiting a dental professional compared to their insured counterparts, but are more likely to visit for emergency dental care.

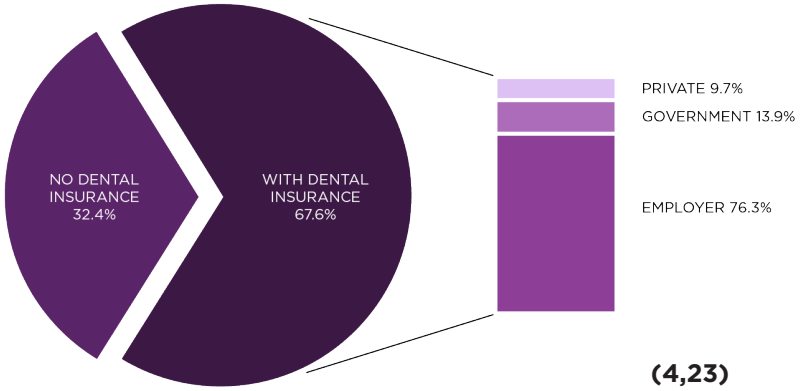


## BARRIERS TO PREVENTION: AN OVERVIEW

As the consequences of poor access to oral health care are understood, along with the simple steps necessary to maintain good oral health, why do we still see a high prevalence of preventable oral diseases in our society? The evidence suggests that issues of access to oral health care, its affordability, and cost of treatments and services are the most significant barriers for those Canadians who do not have access to dental insurance coverage or publicly funded programs. Affordability has been shown to account for roughly half, and all other problems including, but not limited to, mobility, remoteness, cultural issues, awareness, and disabilities account for the other half. (2)

For the two-thirds of Canadians who rely on employer-sponsored insurance, regular visits to an oral health provider are generally not an issue. However, those without private coverage are largely left with no choice but to pay out of their own pockets unless they access publicly funded dental services or programs where available.(2) The numbers are staggering: one in three Canadians do not have dental insurance coverage, and this number is only expected to grow. (21)

**PROJECTED DENTAL INSURANCE COVERAGE IN 2020**




**(4,23)**

> “ Stakeholders in collaboration with the Canadian Centre for Policy Alternatives asked what the future of oral health care in Canada should look like. They queried ‘a strange truth of Canadian public policy: [that] the care of our lips, tongues and throats is fully covered by public funding, but not our teeth and gums.”
>
> Canadian Academy of Health Sciences, Improving access to oral health care for vulnerable people living in Canada. 2014.

For many vulnerable populations such as the working poor and lower-income seniors, oral health services from a qualified oral health care provider are out of reach. Cost is a major barrier for many of these Canadians, but it is not the only factor. Simply addressing financial barriers does not ensure that someone will make a visit to an oral health provider. For many, access can be impeded if a person is unable to receive care in a convenient and comfortable setting where they feel better supported from a cultural, social, or linguistic point of view.

Geographical issues, specifically living in a remote community, can be a factor that limits an individual’s access to oral health services. Though the dentist-to-population ratio varies greatly between provinces, remote and rural areas consistently have proportionally fewer dentists than urban areas.(22) Similarly, there is a privation of oral health providers in rural and remote areas in Canada, leaving access to oral care for these vulnerable populations highly compromised. (23)

A person's mobility is also a significant issue, particularly for the elderly and even more so for those living in congregate settings such as long-term care homes. Dental hygienists are one of the few oral health care providers that have the necessary equipment to service those living in congregate settings and are able to visit individuals where they live and provide them with the oral care that they require.

While these other barriers are important, the cost barrier stands out as the reason most people use for not seeking the oral health services they would benefit from. Specifically, for those of low or middle incomes and who have access to neither public nor private insurance coverage in Canada, the cost of paying out-of-pocket represents a very real barrier to them optimizing their oral health.

## COVERAGE OF ORAL HEALTH SERVICE COSTS IN CANADA

Despite their importance, oral health services are largely excluded from Canada's publicly funded health care services. With the exception of some oral health services in hospitals, provinces have never been required to provide coverage to Canadians under the Canada Health Act and its predecessor legislation.

Dental care was recommended in the 1964 Royal Commission on Health Services that helped shape our current health care system but has yet to become a part of publicly funded health care. This has left almost one third of Canadians without dental insurance coverage, leading to poor health outcomes and stark inequalities. Evidence indicates that dental care should be incorporated into Canada's existing system as it is medically necessary, will decrease long term costs, and its inclusion will promote accessibility and comprehensiveness in our system.

In Canada, general oral health care is not included in the Canada Health Act (CHA). Most Canadians receive oral health care through privately operated dental and dental hygiene clinics and pay for services through insurance or by paying for it themselves. Some dental services are covered through government dental programs.

Given the policy and economic context of the new millennium, it is necessary for any health care, including publicly financed oral health care, to be evidence-based. Evidence exists for oral health care services, particularly preventive services, but surprisingly little exists for the benefits of one service environment over another.

The lack of legislative protection for oral health care programs for vulnerable people living in Canada allows governments, during tough economic times, to stop funding without any significant resistance, regardless of the negative impact that this can have on many people's lives.

> "Today, only one in twenty Canadians access oral health services through a publicly funded program."
>
> Health Canada. Summary report on the findings of the oral health component of the Canadian health measures survey

**The Role of Private Insurance**

In the absence of a significant role for public programs in oral health, Canada's system evolved to one dependent on private dental insurance coverage, largely through employer-sponsored benefit plans.

For nearly 94 percent of Canadians, coverage of oral health expenses is paid privately – that is, through private insurance coverage or having no choice but to pay out-of-pocket for their oral health needs.(24) The vast majority of people depend on private coverage; 62 percent of Canadians had private dental insurance or similar coverage, primarily provided by their employer.(2)

For those that have access to private insurance, this is largely working – although co-payments, deductibles and coverage limits can sometimes create barriers even for those with insurance. While most Canadians enjoy good quality oral health services, those without insurance coverage and for whom out-of-pocket cost represent a continuing barrier, there is very little by way of public programs to fall back on.

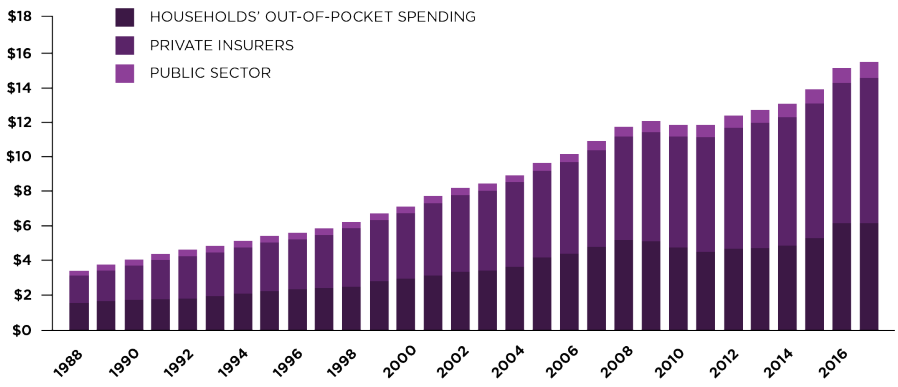
**The Role of Public Funding**

For a country that takes a great deal of pride in its publicly funded health care system, it's remarkable how little government contributes to the overall cost of oral health services when compared to the rest of the health care system. Indeed, Canadian governments contribute so little to the cost of oral health care that we rank among the bottom of OECD nations. (21)

While several provinces and territories, as well as the federal government, offer some programs to help with the cost of dental care and other oral health services, access to them is very restricted. In fact, only about 5.5% percent of the population have access to them.(2) This means that, as a rule, Canadians rely on employer-sponsored dental insurance or pay out of their own pockets when it comes to oral health care.(2)

Out of every dollar spent on oral health care, 94 cents is paid privately, typically through insurance or out-of-pocket by those receiving care. Contrast that with the rest of Canada's health care system where only about 30 cents of every health care dollar is paid privately. (25)

**SPENDING ON DENTAL CARE IN CANADA: 1988 TO 2017**
($ BILLIONS)(23)




The balance – just six cents out of every dollar which is paid for publicly – is split between federal direct spending on specific populations (e.g. populations served by the First Nations and Inuit Branch, members of the Department of National Defence and Veterans Affairs, Royal Canadian Mounted Police, people living in federal correctional facilities, etc.), and those few who benefit from Canada's existing array of provincial/territorial publicly funded dental programs.

This positions Canada as second-to-last in a ranking of the percentage of dental care paid for by governments in high-income countries, offering a potential explanation for the gross oral health inequalities seen among low-income groups. (26)

**PUBLIC SHARE OF PER CAPITA DENTAL CARE EXPENDITURE IN OECD COUNTRIES DURING 2001-2008(26)**

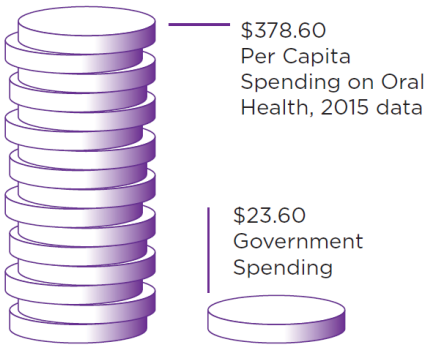
Furthermore, not only does Canada rank near the bottom of its OECD peers on public funding of oral health care, that percentage has been in decline in recent decades. By contrast to the current 6 percent funding level, approximately 20 percent of all oral health expenditures were covered publicly in the 1980s. (27)

> "Public spending on oral health care has fallen from 20 percent of all oral health expenditures in the 1980s to just over 6% today."
>
> Canadian Doctors for Medicare Position statement

**Surveying Canada's Public Oral Health Coverage Landscape**

While eligibility and coverage for medically necessary physician services are largely uniform for Canadians across the country, the same cannot be said about oral health. Instead, in the absence of a pan-Canadian approach to eligibility and access, the oral health coverage map of Canada resembles as much as patchwork quilt as it does a country.

Although health care is a right of citizenship, severe disparities in oral health and inequities in access to oral health care continue and may even be increasing among Canadians. These inequities are inconsistent with the values of Canadians, the social contract the profession holds, and the current resources allocated to oral health care. (28)




The lack of any clear oral health care policy across the country, in combination with the nature of Canadian governance, whereby health is largely governed at the provincial/territorial level with oral health care sometimes governed at the municipal level too, has resulted in major service gaps and a lack of service standards. Since there is no overarching legislation for oral health care, as there

is for physician- and hospital-based care under the Canada Health Act, each province/territory has approached the financing of oral health care services in their own ways. As a result, the same publicly insured person could be covered for different services depending on the province they live in and, in some circumstances, the municipality they live in within the same province. In some cases, support for groups such as low-income adults and seniors is extremely limited or can be completely discretionary.

In summary, there is no consensus on standards of oral health care provision among federal, provincial, territorial, and municipal governments in Canada, especially for seniors. The small proportion of publicly funded oral health care services provided across the country varies enormously between jurisdictions.

Most public oral health programs fall under provincial/territorial jurisdiction. These include programs administered at the regional and municipal level, as well as through universities. While certain services are covered by public insurance, many of these oral health care services are delivered by allied oral health care professionals, such as dental hygienists and dental therapists.

Public oral health programs at the provincial/territorial level include:

- Surgical-dental services requiring hospitalization or associated with a congenital anomaly or medical need,
- Social assistance recipients and their dependents,
- Targeted child and adult populations (e.g., low-income families),
- Targeted disabled and institutionalized populations (e.g., those in long-term care),
- Some seniors,
- Targeted individuals with developmental disabilities,
- Provincial prisons.

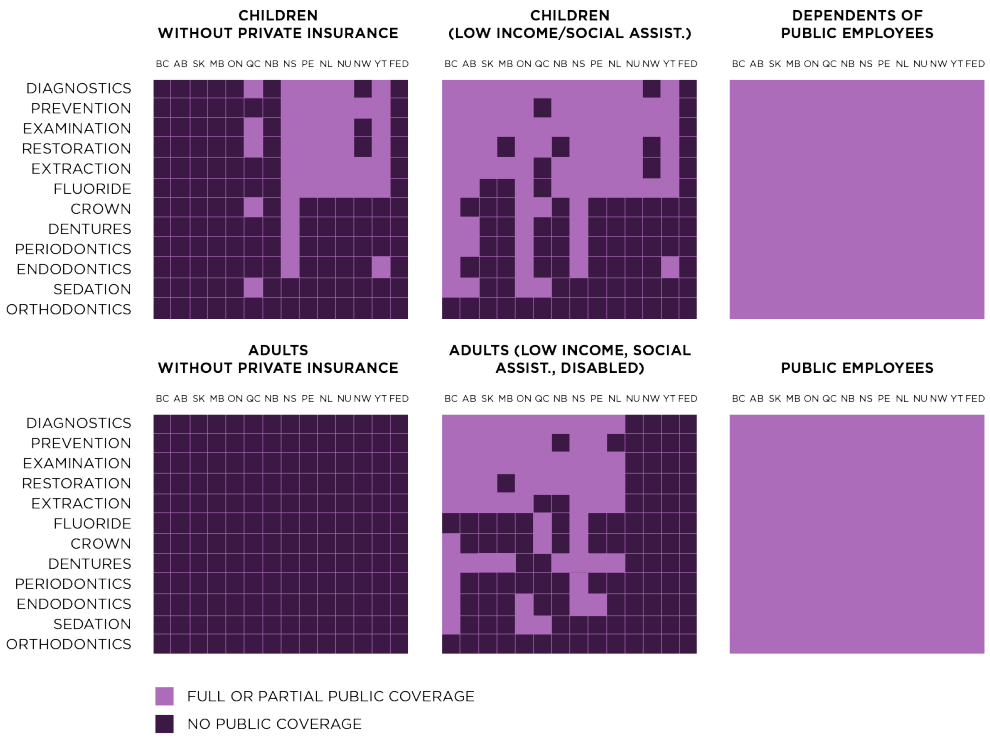
All provinces and territories offer some form of support for children. Provincial/territorial programs tend to be focused on where the burden of oral disease is most felt – low-income families, children of Indigenous families, new immigrants, and children with special health needs. In many instances, targeted provisions in legislation also require provision of oral health services for children in foster care. Not only are these populations more likely to experience higher level of oral disease, but they are also more likely to experience challenges accessing oral health care. Sadly, there are no legislative mandates similarly requiring the provision of oral

health services for seniors (for example, in congregate living settings), even though they also experience challenges accessing the oral health care they need.

Age eligibility varies greatly across the country, with some provinces (New Brunswick, Ontario, Manitoba, Alberta) making care available to children of low-income families who are aged 18 or under. British Columbia's Healthy Kids program provides limited coverage for basic dental surgery, anesthesia fees, and emergency treatment for pain relief for children from low-income families receiving premier assistance through the province's medical services plan. Some provinces, however, provide oral health services only to much younger children – age 10 and younger in Quebec, and 14 and younger in Nova Scotia, for example. Newfoundland and Labrador stand out as providing diagnostic, preventive, periodontal and restorative services to all children 12 years and under, while also providing coverage to youth (age 13-17) from low-income families or on social assistance.

Programs vary widely in terms of coverage and tend to focus on treatment- based (as opposed to preventive-based) care. Most provinces offer basic treatment that includes dental exams, cleaning, topical fluoride, sealants, x-rays, fillings, and extractions while British Columbia includes orthodontic care.

**PUBLIC DENTAL COVERAGE FOR CHILDREN AND ADULTS**



**The Role of the Federal Government**

While the vast majority of public spending and coverage comes through provincial and territorial programs, the Government of Canada plays an important role for specific populations, such as nearly 900,000 First Nations and Inuit Peoples through the Non-Insured Health Benefits (NIHB) program.

The NIHB program offers eligible First Nations and Inuit clients' coverage for prescription drugs and over-the-counter (OTC) medications, vision care, medical supplies and equipment, mental health counselling and transportation costs when health services are not or in the community of residence.

When it comes to dental benefits, NIHB provides a broad range of services, including:

- diagnostic services such as examinations and radiographs
- preventive services such as scaling, polishing, fluorides and sealants
- restorative services such as fillings and crowns
- endodontic services such as root canal treatments
- periodontal services such as deep scaling
- removable prosthodontic services such as dentures
- oral surgery services such as extractions
- orthodontic services such as braces
- adjunctive services such as general anesthesia and sedation

The total expenditure for dental benefit claims through NIHB was $282.9 million or 18.6% of total NIHB expenditures, representing a per capita cost of $313.00 in 2019-2020.

In addition to the NIHB program, the Government of Canada provides direct coverage for oral health services for veterans who require income assistance or are disabled, for inmates of federal correctional facilities, as well as for refugees. As well, members of the federal public service, the RCMP and active military also have oral health coverage provided by the federal government.

**The Role of Canadian Municipalities and Public Health**

While many programs are mandated provincially, it often fall on health regions, municipalities and public health units to deliver programs for the following:

- Social assistance recipients and their dependents,
- Targeted child and adult populations (e.g., low-income families),
- Targeted disabled and institutionalized populations (e.g., those in long-term care).

Universities and social welfare groups deliver care to a variety of vulnerable populations through their clinics, usually with discounted fees.

**Provincial Programs for Seniors**

Programs providing coverage to seniors specifically are very limited. Nationally, there are seven provinces and territories that have programs that provide coverage to at least some seniors (65 and over). In nearly all cases, these programs are designed to benefit only low-income seniors whose income falls somewhere below a line established by government. What is covered by these programs is not consistent across the country and, in all many cases, income eligibility thresholds are set around the low-income cut-off. In other words, to be eligible for these programs seniors must essentially be living in poverty, leaving out hundreds of thousands of other lower income seniors who quite simply could not be reasonably expected to shoulder the out-of-pocket costs for oral health care.

Services are sometimes funded or reimbursed on a fee-for-service basis, whereas in other provinces (Ontario, Quebec for example), the program funds oral health clinics that employ or contract oral health service providers. In these latter cases, capital funding to support equipment purchases and/or facilities may also be made available.

As well, PEI and Quebec have programs which benefit directly those in long-term care homes, although seniors in long term care or living in other congregate living facilities may also be covered by a public program, provided they meet the eligibility requirements.

**Persistent Gaps for Senior's Coverage**

While at first glance, it may appear that low-income seniors in most provinces and territories have access to oral health program coverage, the reality is that to be eligible one typically needs to be on some form of social assistance or fall below a very low-income eligibility threshold. For example, Saskatchewan, Nunavut, Northwest Territories, and New Brunswick all require a resident to be on some form of disability or social assistance to qualify. Meanwhile, in other provinces, services may also be available to people who fall below an income-based eligibility threshold. In Ontario, for example, a senior living alone would need to have an income at or below $22,200 or, in the case of a couple, a household income of less than $37,100 to be eligible. In Prince Edward Island, the program requires that a single senior would need to earn $22,014 or less, to qualify for care.

**EXAMPLES OF INCOME ELIGIBILITY THRESHOLDS FOR PROVINCIAL SENIOR ORAL HEALTH CARE PROGRAMS**

| PROVINCE | INDIVIDUAL | COUPLE |
|---|---|---|
| ONTARIO | LESS THAN $22,200 | LESS THAN $37,100 |
| ALBERTA | LESS THAN $29,285 | LESS THAN $58,570 |
| SASKATCHEWAN | LESS THAN $4,560 | LESS THAN $7,440 |
| NEWFOUNDLAND AND LABRADOR | LESS THAN $27,152 | LESS THAN $30,009 |
| PRINCE EDWARD ISLAND | LESS THAN $22,014 | LESS THAN $31,132 |

Not all provinces limit coverage to those on assistance or living below or near the poverty line; some do much better when it comes to income eligibility. Alberta, for example, has an income threshold of $29,285 for a single senior and a senior couple would qualify for 100% coverage with an income of $58,570. Newfoundland and Labrador offer 100% coverage for a single person with an income level below $27,151 and at $30,009 or less for a couple. These two provinces also offer sliding scale coverage above those incomes, with increasing co-pays at higher income tiers. For example, In Newfoundland and Labrador, a single senior with an income of between $22,014 to $24,215 would have 80% of their costs covered while the rest would represent an out-of-pocket cost. Even so, these programs would still represent an access barrier when one considers the cost faced by seniors who have such limited income.

For lower income seniors, even those who are living well above the low-income cut-off for 100% coverage, any out-of-pocket cost – whether in the form of even a modest co-pay or whether it be the full cost of their oral health care – can represent a significant financial burden. In Canada, out of pocket oral health costs can range from $74 to $150 with dental insurance coverage and $390 to $3,800 without insurance.

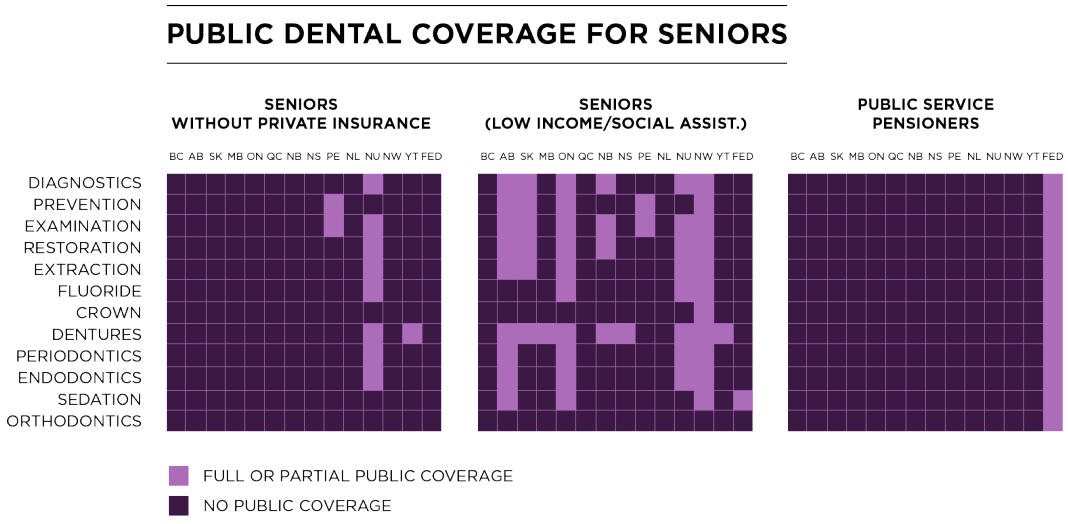
Also, not all types of services are covered by provincial plans for seniors, with many focusing on basic preventive care as a priority, where there is often the most benefit from a cost effectiveness point of view. Most provinces, with some exceptions, offer basic preventive treatment such as:

- Diagnostics – X-rays
- Restorations
- Extractions
- Crowns and bridges, under certain circumstances

While Alberta, for instance, covers more than the treatments mentioned above to include:

- Endodontic treatment (root canal)
- Periodontal treatment (gum disease)
- Dentures

The infographic below outlines what services are covered by provincial programs across the country.



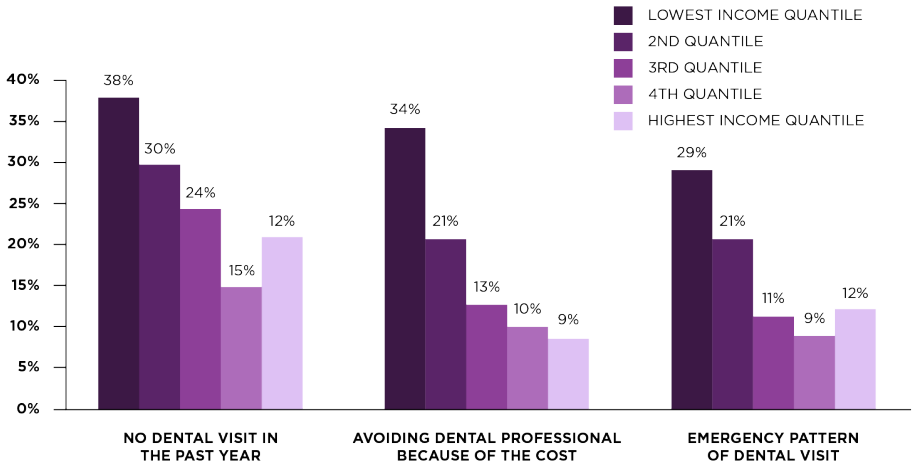
## LEFT OUT AND LEFT BEHIND: THE STATE OF INEQUALITY OF ORAL HEALTH CARE FOR CANADA'S MOST VULNERABLE POPULATIONS

Over the past 40 years, Canada has seen a persistent increase in the magnitude of oral health inequalities, as seen in national rates of untreated disease. (29) In fact, Canada sees more inequalities in oral health outcomes compared to many other developed nations, demonstrating a clear issue of access to oral health care. (26) Without appropriate access to care, high-risk populations in Canada become more vulnerable to oral diseases and conditions, thereby exacerbating national inequalities in oral health.

A considerable body of literature supports that high-risk populations consist of socially and economically vulnerable populations for whom conventional private oral health care is often inaccessible. In a recent study evaluating the relationship between income and oral health in Ontario and British Columbia, researchers found that lower-income respondents were more likely to report poor overall health. (30) These findings are consistent with the past decade's worth of literature pointing to a significant association between being in a low-income group and poor oral health status.(26)

Unfortunately, financial insecurity also influences the level of priority an individual without dental insurance coverage might give towards spending money on their oral health needs. With limited disposable income, oral health care, especially preventive oral health care services – regular visits to an oral care provider especially – are less likely to be prioritized. (31) According to the 2016 Commonwealth Fund International Health Policy Survey, the number of Canadians who skipped dental care in the past year due to cost may be as high as 28%.(32) Not unexpectedly, this phenomenon was observed much more frequently among lower-income adults than those in higher income brackets. In a cross-sectional study in Ontario and British Columbia, researchers found that income inequality was strongly associated with not having visited a dentist in the last year, and to a greater degree, with not having visited a dentist for three or more years. (30) The issue of access to care for low-income groups is so severe that Canada sees a much greater concentration of oral diseases among lower-income groups than the concentration of general health conditions, such as obesity and high blood pressure. (26,33)

**INDICATORS OF DENTAL CARE ACCESS BY FAMILY INCOME LEVELS IN CANADA**




Beyond access to care challenges, studies have also supported that low-income individuals face a greater risk of poor oral health due to economic barriers in accessing healthy foods. Low-income neighborhoods are often "food deserts", regions with poor access to healthy foods leading to a disproportionate reliance on energy-dense foods. Poor diets like these are also associated with oral health issues. (30)

But it's more than just about money. The availability of qualified oral health care providers can also be a challenge in some communities. Canadians living in rural areas are cited as one of the most vulnerable when it comes to access to healthcare. Without subsidies or incentives, most oral health care providers are unwilling to move to remote communities, which remain poorly serviced. Provincial governments across Canada have attempted to provide subsidy programs for dentists to work in remote regions, but many were discontinued due to lack of interest. This situation may improve, however, as the current government campaigned on a pledge to expand the student loan forgiveness program for dentists and dental hygienists willing to work in remote or rural communities after graduation.

It is also critical that oral health care becomes available to people in a wider variety of settings, giving people options that are more culturally sensitive, more supportive of any mobility restrictions or other issues they may have, and are in environments where they feel more comfortable. Research shows that people living on low incomes prefer to be treated in public dental clinics where they are welcomed and valued, and that many private dentists are frustrated because public programs compensate them poorly and low-income people not covered by a public program don't have the means to pay. (34)

As well, recent studies have found that the distribution of dentists in a metropolitan area is correlated with income distribution, adding to the issue of access for lower-income Canadians who face geographical barriers in addition to cost issues. (30)

## A FOCUS ON THE ORAL HEALTH NEEDS OF SENIORS

The prevalence of systemic diseases and polypharmacy among the elderly, as well as other risk factors, make seniors particularly vulnerable to oral diseases.

There are multiple oral health conditions that disproportionately impact seniors; these include dental caries, periodontal disease, medically-induced dry mouth (xerostomia), ill- fitting restorations or prosthesis, oral candidiasis, and cancer. Oral and pharyngeal cancers disproportionately affect seniors with the median age of diagnosis being 62 years. (35,36)

Dry mouth can lead to an increase in tooth decay and periodontal disease. It is a condition often associated with age and can be attributed to several different factors, including high blood pressure, heart problems, Sjogren's disease, diabetes, many different medications, and dehydration.

Periodontal disease is also prevalent in seniors with nearly two-thirds of adults aged over 65 years living with the condition. (35) Seniors are also more susceptible to cavities forming closer to the root of the tooth, especially in areas where the root is exposed because of receding gumline.

While there has been great progress made in terms of the number of dentulous seniors, seniors continue to experience more tooth loss as they age. The rate of tooth loss is twice as high among those age 75 and older than compared to those between 65 to 74. Tooth loss or pain can significantly affect seniors with regard to changes in food consumption and consistency, diet quality, and social eating practices. Furthermore, poor nutrition can lead to difficulty chewing and swallowing, dehydration, and other serious health conditions. Seniors are already facing a higher degree of risk for poor nutrition according to a study of Canada's seniors which found that 34% are at high nutritional risk. (37)

Seniors are more likely to consume a high percentage of prescription and over-the-counter drugs to treat ailments and chronic illnesses. Many of these drugs have side effects that can be observed in the oral cavity and have a huge impact on their oral health; dry mouth is a prevalent side effect associated with many medications which can increase the risk for dental caries and oral tissue discomfort or pain.

**Chronic Disease and Aging**

The strong correlation between aging and the prevalence of chronic disease makes it even more imperative that action is taken to ensure greater care and attention to oral care in the elderly.

As we age, we become more susceptible to the development of chronic diseases; diseases which can have cascading impacts on our oral health and vice versa. Bodily systems, ranging from the neurological and cardiovascular to the musculoskeletal systems, rely on many of the same organs within the body and have both a connection to and an impact on the oral cavity.

The vast majority of seniors have one or more chronic illnesses, representing a significant risk factor for that individual. To those adults, especially those with multiple chronic diseases, prevention of oral disease or of disease progression becomes paramount as serious adverse health outcomes can result. Moreover, untreated oral disease can exacerbate or complicate treatment of other medical conditions and, that too, can result in grave consequences.

Not only can good oral health care help prevent systemic diseases among the elderly or prevent such diseases from becoming more serious, but regular oral health care visits can also support early detection of certain head and neck cancers, as well as bone-related and inflammatory disease.

> "Whether poor oral health is a contributor, or an indicator of these serious and sometime life-threatening conditions, it underlines the need for older adults to receive regular assessments, maintenance, and treatment..." (38)

Public funding of oral health care services across the country do not cover many of the services required to support seniors in maintaining good oral health, such as regular oral assessments, preventive services, and treatments. As seniors enter

retirement, they often lose access to employer-funded dental coverage and see a reduction in their disposable income. Cost serves as a barrier to maintaining good oral health; in a Canadian survey of those aged 60 to 79, 13 per cent of respondents avoided the dentist and 16 per cent declined treatment because of the cost. (2) According to the 2010 Canadian Health Measures Survey, only 53 percent of Canadian seniors had private insurance (2), well below the level of the population at large.

**The Impact of Edentulism**

An adequate dentition is of importance for well-being and quality of life. The number of teeth is a key determinant of oral function and oral health status. (38,39) Several studies using different methodologies have demonstrated that an important indicator for masticatory efficiency is the number of functional tooth units. (40,41)

While tooth loss continues to be a problem for older Canadians, the growth in the proportion of edentulous seniors – those who continue to have no natural teeth creates an even greater imperative to ensure oral health care for seniors so that they may continue to maintain their teeth as they age. Edentulism has a series of deleterious consequences for oral and general health. Oral consequences vary from the well-known residual ridge resorption to an impaired masticatory function, an unhealthy diet, social disability, and poor oral health quality of life. Edentulous individuals are also at greater risk for different systemic diseases and an increase in mortality rate. Therefore, oral health care providers should prevent tooth loss with proper dental education, oral health promotion, and a high level of dental care in an attempt to assure the existence of a physiologic dentition. (42)

The edentulous rate of people in Canada refers to the percentage of people in Canada who do not have any of their natural teeth. People who do not have any of their own teeth, have usually lost them due to extensive cavities or as a result of severe conditions with their gums. Not having any natural teeth can cause eating problems which can affect how many nutrients a person gets in their body. Edentulism can also affect the way a person talks. The CHMS reported that:

- 6% of adults (20–79 years of age) do not have any of their natural teeth; and
- 22% of adults from 60–79 years of age are edentulous compared to 4% among the 40–59 years old

**The Challenges of Seniors in Long-term Care and Other Congregate Living Settings**

Oral health is vital for overall health and well-being and daily hygiene should be executed for both dentulous and edentulous individuals. Oral health issues are associated with poor diets among seniors, and particularly, seniors living in long- term care residences. A loss of teeth or pain leads to changes in food consumption, diet quality and social eating practices that have consequential impacts on other diseases.

Those living in congregate settings, such as long-term care homes face significant and particular challenges. These people, often quite elderly, typically have complex health issues and various co-morbidities, restricted mobility, and often little disposable income. Consequently, very few people in long-term care benefit from access to an oral health provider, or even basic oral health maintenance.

It is well-established that oral hygiene and the oral health care of seniors in long-term care facilities is insufficient.

McKeown et al. have shown that oral care is often overlooked in residents of long-term care (LTC) homes, many of whom have poor oral health. Cleaning their own teeth or dentures can be a challenge for residents, and assistance from point-of-care staff or oral health professionals may be inadequate, inaccessible or unavailable. (43) Staff often report insufficient time or materials to perform oral care, resulting in ineffective removal of debris. Additionally, residents with dementia often forget to brush their teeth and can be combative or refuse care. Inadequate oral care, coupled with snacks and supplements high in sugar content and the use of sweet foods to facilitate medication administration, can lead to serious health consequences for LTC residents including oral disease, cardiovascular disease, stroke, and pneumonia.

Maintaining a healthy diet has been shown in a number of studies to also help with cognitive function in the elderly. (44) The Canadian Institute for Health Information reported that nearly 80 percent of long-term care residents have at least some mild cognitive impairments and almost 80 percent either require extensive assistance with activities of daily living or are totally dependent. (26,45) Cognitive impairment and a high-level of dependency have been associated with poor oral health outcomes and a greater need for access to oral health care services and access to support systems to help with daily oral care.
A study using CCHS data from Ontario found that 43.2 percent of long-term care residents had inadequate denture hygiene, and 79.6 percent had moderate-

to-severe gingival inflammation; two issues that are entirely preventable with appropriate oral health care. (26)

The COVID 19 pandemic revealed the sad reality of oral care's low priority in long term care (LTC) homes. One case study in a newspaper reported a lack of oral care during a COVID and Canadian Forces members deployed to assist in long term care homes identified poor mouth care issues in their report on conditions there. (46)

In addressing the needs of lower income seniors, consideration should be given to the specific oral health challenges of all those who are living in a long-term care home, regardless of age, particularly mobility issues which can make going out to a care provider a challenge.

Yoneyama et al. have shown that by providing oral care in long-term care settings, the risk of developing aspiration pneumonia can be reduced. (47) Nevertheless, provision of both professional and personal oral care in these environments is difficult. Few oral health providers, with the exception of independent dental hygienists and denturists, provide mobile oral health services or deliver care in long-term care settings, and organizational policies and processes are difficult to establish and maintain. (47) It is argued that an interdisciplinary approach that includes nurses, physicians, occupational therapists, and speech language pathologists in addition to dental hygienists, denturists, and dentists will improve knowledge and awareness and move oral health practices closer to best practice. (47) It is also recognized that unregulated health care providers, friends, families, and clients also contribute and should be included in this team approach. (47)

"But the other barrier...is that we're not reaching our residents in long term care, like a lot of the people that we work with when we're out to Mount Hope and some of our other homes is that they can't leave that facility because they're so frail, and they're so ill. So, we need to have dental hygienists as an integrated part of the long-term care home system. And so, homes have registered dieticians, they have access to speech language, pathologists, physiotherapy, occupational therapy, but unless that home has a relationship with either a dentist or an independent dental hygienist, those residents don't get care."

Key Informant Interview

## COSTING AND IMPLEMENTATION

This policy paper recommends that, over a five-year period, the Government of Canada make $2 billion available to those provinces and territories that agree to implement, within their own jurisdictions, a plan to provide oral health coverage to lower and middle-income seniors at no cost at the point of care.

While the federal government should develop a framework of common criteria provinces and territories should expect to meet – such as setting eligibility at age 65 and above, establishing income eligibility thresholds – this policy paper respects the role that provinces and territories themselves should play in determining their own strategies and approach to implementation. The implementation of a new senior's program isn't a matter of starting from nothing, but built on the foundation of existing approaches, care networks, and the availability of the people and infrastructure to provide care.

As participating jurisdictions move forward on implementation, this policy paper further recommends that they each develop and publish their strategies and plans for meeting the commitments they have agreed to. In developing these strategies, it is expected that each province and territory would work with oral health professionals, stakeholder organizations and experts, as well as with other health care professionals and health system leaders, in a manner that would optimize access, health outcomes, and a more integrated approach to oral health services within the context of the broader health system. It's time to recognize the fact that oral health is integrally connected to overall health.

How much a new senior's program would depend on a number of factors, including decisions about program implementation that would be made at the provincial and territorial level, as well as changes in utilization patterns when it comes to seniors' own decisions around accessing oral health care and the availability of oral health professionals.

While this paper does not intend to make recommendations regarding provincial-level implementation, certain assumptions were necessary to calculate the anticipated cost of the program. Of particular note, as we have used the PBO's methodology and data, this cost estimate similarly assumes private delivery on a fee-for-service basis. However, we note that there may be opportunities to organize care differently for some populations – particularly seniors living in long-term care or other places of congregate living – that are better suited to those populations, and which could also prove more cost-effective. For example, funding a dental

hygienist to provide routine oral health services on a regular basis to residents of a long-term care would not only assist with mobility challenges for many of them, but it could also be more cost effective than reimbursing individual visits to a private oral health provider on a fee-for-service basis.

**Costing the plan**

> "There have been very few real serious studies about the cost of dental care program for Canada"
>
> Key Informant Interview

This paper has proposed that the federal government contribute $2 billion over five years towards provincial/territorial costs to their implementation and delivery of a senior's oral health care plan for low-income seniors.

The proposed contribution from the federal government is expected to cover the entirety of the program during the five-year term of the agreement, even though some provinces already spend money on basic oral health services for low-income seniors and have allocated resources towards them. It is hoped that those provinces would see this as an opportunity to expand and improve oral health care services for their seniors rather than an opportunity to reduce funding in oral health care. Furthermore, as discussed below, provinces and territories should work towards having more seniors access the care they would be eligible for and if they do, this would result in higher per capita costs than currently projected.

In October 2020, the Parliamentary Budget Officer (PBO) issued a report estimating the cost of establishing a dental care program for uninsured Canadians with a total household income below $90,000. If adopted, that program would be expected to cost the government of Canada $11 billion over five years, although the net cost after individual contributions (co-pays/deductibles) was anticipated to be $9.9 billion. Some 6.5 million Canadians would be eligible for coverage under that program. (25) A motion introduced by NDP MP Jack Harris was debated and voted on in the House of Commons in 2021 but was defeated by a vote of 285 to 36. (48)

In calculating the cost, we largely relied on the PBO's cost model and data which, in turn, relied on data from the Canadian Health Measures Survey (CHMS), Statistics Canada, Telus Health Analytics' Dental Data Metrics, and from the Non-Insured Health Benefits Program. In addition to information supplied by the PBO analysis, additional population and income information was obtained from Statistics Canada. The research team also benefited from Audrey Laporte and Adrian Rohit Dass' detailed health economics and microsimulation model examining the cost effectiveness of oral health programs for low-income seniors and social assistance recipients.(3)

First, we estimated the number of individuals who would be eligible to be in the program -- uninsured Canadian seniors, aged 65 and older, whose annual income would place them in the bottom two income quintiles, approximately $65K for a household or $30K for a single person.

What's proposed here is a program benefiting a smaller number of people than the 6.5 million who would have been eligible under the program initially costed by the PBO. At the same time, it is a population with a higher burden of chronic illnesses and other risk factors and for whom regular visits to an oral health professional are a high priority and where higher cost effectiveness has been established. It is also a population more likely to be uninsured, with a slight majority of seniors living without insurance.

There are 2.8 million seniors whose income would put them in the bottom two quintiles. Of these, we assume that 53% of them did not have insurance.(2) Which resulted in a total of close to 1.5 million eligible Canadian seniors. However, we should be mindful that the CMHS data from which the 53% number is derived from represents seniors aged 60-79, with no data for those over 80. Indeed, when looking at the population aged 65 and over, the percentage without insurance is potentially much higher.

The next step was to multiply the number of eligible beneficiaries by the cost-per-beneficiary. It is important to note that the cost-per-beneficiary is not the same as the annual treatment cost of an average patient but also incorporates utilization rates, which assume that not everyone who is eligible for coverage will necessarily access oral health services. For the purposes of this calculation, we used $251 as the average cost per beneficiary (the PBO's 2022-23 figure) and applied a 2% annual cost escalator for each year thereafter.

It is important to keep in mind, that the PBO's numbers may quite likely underestimate the cost-per-beneficiary when it comes to seniors' oral health needs. The PBO calculations included all ages of low-income, including the relatively low cost of providing oral health services to the very young who may only need preventive dental hygiene care such as a check-up, fluoride varnish, bitewing radiographs, and a prophy including, possibly, a half unit of scaling. The basket of services for seniors is far broader, more comprehensive and some treatments like extractions followed by the delivery of immediate dentures can get very costly.

Also, if the programs are designed properly and support meaningful measures to improve the oral health and access to oral health care services for seniors, we should expect a higher utilization rate – which would increase the cost-per-beneficiary. When assessing current programs, we see far less people accessing oral health services than the number of people who are actually eligible. For example, in 2019 to 2020, the national utilization rate for dental benefits under the NIHB program was just 37% of those who could access services. When you consider the importance of having regular preventive dental hygiene care, the intention should be to have as many eligible recipients accessing oral health care each year.

Given that the utilization rate may be higher than predicted, the basket of services more comprehensive, and the need greater as these seniors may have been waiting for years to access oral health services (as seen in Ontario), we acknowledge that $251 per beneficiary may be too low. On the other hand, there are also opportunities to incorporate different models of care delivery within different community settings. Potentially, provinces and territories could integrate qualified oral health professionals within health care teams and other community service providers to ensure a more efficient program delivery. Furthermore, having qualified oral health care professionals in long term care homes would not only address some of the non-financial barriers that residents face, but it would have the potential to be more cost-effective as well.

The true cost of a seniors' program will, of course, depend ultimately on the decisions governments make with respect to the basket of services that will be covered, the mechanism in which services will be funded (reimbursement of services on a fee-for-service basis vs. funding services or positions directly), and the degree to which they will commit to facilitating good quality access to the oral health services that all seniors would benefit from. Given the importance of oral health to Canadian seniors, it is our hope that governments at all levels would set a high bar in terms of quality, comprehensiveness, and ease of access to a publicly funded oral health care program for seniors.

**Our seniors deserve nothing less.**

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Delphic Research
April 1, 2022

THE CANADIAN DENTAL HYGIENISTS ASSOCIATION
L'ASSOCIATION CANADIENNE DES HYGIÉNISTES DENTAIRES