

Left Behind: **The State of Oral Health in Ottawa**



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All opinions and interpretations in this report are the opinions, interpretations, or perspectives of the author and editorial team and do not necessarily reflect the opinions of any organizations or people referenced in this report. All analysis is by the author and any mistakes are his alone.

About Green Shield Canada

GSC is Canada's fourth-largest health and dental benefits provider and is uniquely structured as a social enterprise with the purpose of making it easier for people to live their healthiest lives. From coast-to-coast, our service delivery includes drug,

dental, extended healthcare, vision, hospital, and travel benefits for groups and individuals, as well as administration and benefits management services. Supported by outcomes-based sustainability strategies, advanced technology, and exceptional customer service, GSC creates innovative programs for nearly four million plan participants nationwide.

At GSC, our vision is to achieve Better Health for All. We believe that all Canadians should have access to services they need to improve their health and well-being, but for too many that's not a reality. We're focusing on filling gaps in the Canadian health care system in oral and mental health, two foundational areas that a large number of Canadians struggle to access.

This is why GSC is proud to partner with the Ottawa Community Foundation in establishing the GSC Community Impact Fund, with the goal of investing in local organizations dedicated to improving oral and mental health in the Ottawa community - areas that are typically under-funded and under-resourced. The Fund supports initiatives that help increase access to dental services for underinsured and uninsured Canadians, as well as initiatives that enable the delivery of mental healthcare and increase awareness of mental health issues and resources.

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Executive summary

Across Canada, one in three people lacks coverage for dental care, while low-income Canadians are four times more likely to avoid seeing a dentist because of cost and two times more likely to have poor dental outcomes. Access to dental care is often overlooked and underfunded, and is deeply intertwined with complex social issues, from the rise of precarious employment to increasing food insecurity. One thing is clear: for many of the most vulnerable people in our communities, the current system has left them behind and without support. How did we get here, and what can be done?

Oral health needs of Ottawa residents aged 12 and older in 2017/2018



195,600

did **not** have **dental insurance** in 2017/2018



154,600

people **avoided going to the dentist due to cost** in the last 12 months



100,100

residents only go to the dentist for **emergency care or never**



63,000

people report **dissatisfaction** with the **appearance** of their teeth or dentures



28,600

residents report often having **persistent pain in their mouths**

Source: Canadian Community Health Survey, Ottawa Health Unit, 2017/2018. This survey likely undercounts the number of people with poor oral health due to the difficulty in surveying marginalized groups (such as the precariously housed) who disproportionately have poor oral health. Data only captures residents 12 years of age and older.¹

This report highlights the importance of oral health and analyzes the state of oral health in Ottawa, compared to other regions. It also takes a deeper look at who has dental insurance in Ottawa and who doesn't and provides recommendations for how oral health outcomes can be improved in the region. It outlines community organizations, public health efforts and initiatives underway in Ottawa that are providing critical oral health programs.

This study draws on data from the 2017/2018 Canadian Community Health Survey (CCHS), which is the most recent reliable data at the time of this report writing. The CCHS includes responses from 1,482 respondents from the Ottawa Health Unit aged 12 years and older and offers a glimpse into the state of oral health in the community, further summarized throughout this report. This study also draws on the existing oral health literature and interviews with local oral health experts.

Ottawa has the highest rates of dental insurance in the province among the larger Ontario public health units analyzed, yet 195,600 residents (24%) still do not have coverage in data from the 2017/2018 CCHS. The problem is especially acute for immigrants to Canada, 31% of whom lack insurance (compared to 22% of Canadian-born residents).

These challenges have resulted in more than 148,000 Ottawa residents avoiding the dentist due to cost in 2017/2018, with more than 28,000 reporting persistent pain in their mouths.

This study demonstrates that many people in Ottawa face significant oral health challenges:

- Ottawa had the highest rate of dental insurance among large health units in the province at 76%, vs 67% average for the province.
- People without dental insurance had worse oral health and were more likely to avoid the dentist, with numerous negative oral health and overall health implications ranging from persistent pain, associations with heart disease, and complications with other illnesses to lower productivity, more missed work, and worse academic and employment outcomes.
- Canada has much lower public spending on dental care than other OECD countries, and Ontario has the lowest per capita public spending across provinces, leaving many challenges for those without dental insurance in Ontario.
- Challenges for the uninsured are growing - over the last 20 years, dental care services have increased at nearly twice the rate of inflation (81% vs. 41%).
- Complicating matters, those with lower incomes are most likely to not have any insurance, with 55% of those with household incomes between \$20,000 to \$39,999 not having any insurance, a figure that is slightly higher than those with less than \$20,000 in household income (47%). By contrast, only 16% of people with incomes over \$80,000 do not have insurance.
- Racialized residents were less likely to have insurance (30%) than white residents (23%).
- The aging population will also present growing oral health challenges, as 36% of 65- to 74-year-olds and 40% of those 75 and older do not have dental insurance, with this population expected to grow by 44% between 2018 and 2025.
- In Ottawa, people with functional difficulties have much lower self-perceived rates of oral health. This is especially true for people with difficulty with self-care, only 35% of whom rate their oral health as very good or excellent, compared to 65% of people without this difficulty.
- Rapidly increasing rents and housing costs will present ongoing challenges, as renters were 1.5 times as likely to not have dental insurance as home owners (32% vs 21%).

The implications of these problems ripple across so many domains of health. Oral inflammation is associated with heart disease, growing evidence links tooth pain and depression, and employment outcomes are worse for those with lower oral health. Other studies suggest that tooth loss can contribute to locking individuals in a cycle of homelessness and that low-income students have higher dental pain rates, contributing to worse academic performance. Poor oral health is linked to worse physical, mental and social outcomes and represents a pressing and underserved health-care issue. These challenges and more are discussed in this report.

Together, all of this paints a clear picture: access to dental care is not only a health concern, but it also represents a significant social issue that is intricately connected to the broader wellbeing of community members. During the pandemic, it has become even more clear (although already well-established) that gaping inequalities exist in our society, and Canada's dental care system is no exception. Improved access to oral healthcare could be a plank of any build back better initiatives. Essential workers, who are more likely to be racialized, have borne the brunt of the pandemic and are more likely to lack dental insurance. Even as these workers have kept society functioning, many of them do not have access to basic benefits, including dental care.

Method

This study makes use of the Canadian Community Health Survey (CCHS) from 2017/2018.

The survey is a voluntary, cross-sectional survey that collects health status and health systems utilization and health determinants, including dental care, dental insurance, and oral health information.

The CCHS surveys approximately 65,000 people aged 12 years and older from across Canada each year and provides reliable health information at the regional level every two years. This report uses the combined data from 2017 and 2018.

The public use microdata file (PUMF) was used for this analysis. The City of Ottawa Health Unit had 1,482 valid responses in the PUMF.

Limitations

All data is self-reported and may not be recalled accurately. The survey is offered in English and French.

While the CCHS is the most widely used source for understanding regional health trends, like any survey, it tends to underrepresent low-income populations, people who do not speak official languages, newcomers, precariously housed individuals and other populations of interest, and the survey likely underestimates some challenges because of this.

In this report, sub-regional segmentation is used, which should be interpreted with caution. In addition, this data makes comparisons between the 2005 and 2017/2018 Canadian Community Health Surveys. In 2015, a new collection and sampling strategy were implemented, and any comparisons should be interpreted with caution.

The state of oral health in Ottawa

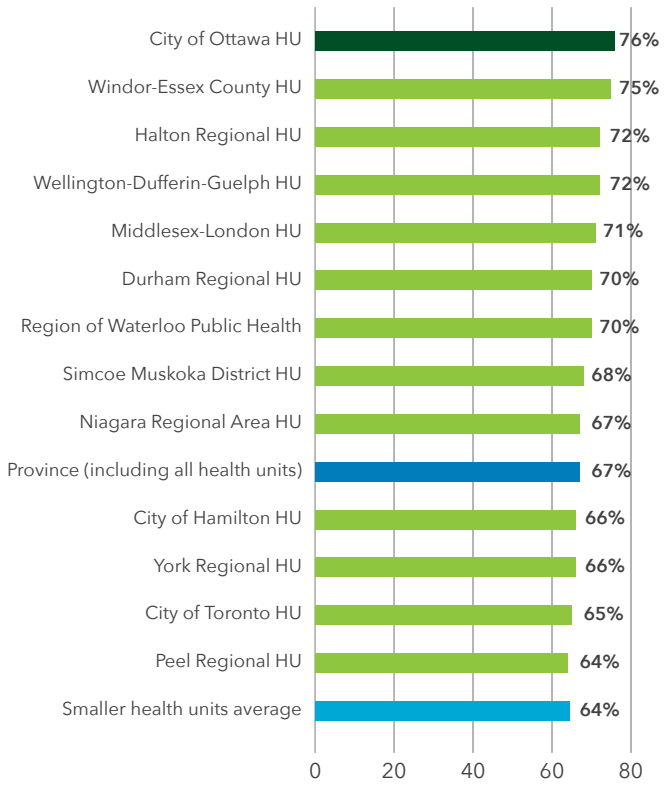


Dental insurance coverage in Ottawa is better than anywhere else in Ontario

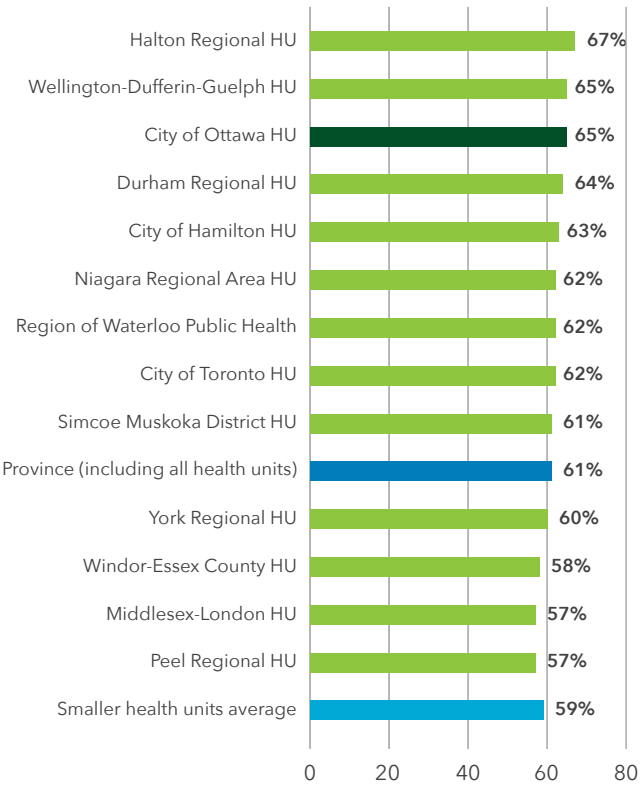
The high cost of dental care in Ontario means that most people need to rely on private insurance or pay out-of-pocket. About 50% of oral health spending comes from employer-provided benefits, 44% is paid out-of-pocket, and only 6% comes from public sources.²

76% of Ottawa residents have dental insurance, which is the highest rate in the province among larger health units. Private dental insurance programs have played an essential role in maintaining good levels of oral health among people who are fortunate enough to have insurance.

Rates of dental insurance, 2017/2018, Ontario



Rates of self-perceived "excellent" or "very good" oral health, 2017/2018, Ontario



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

People without dental insurance are avoiding going to the dentist

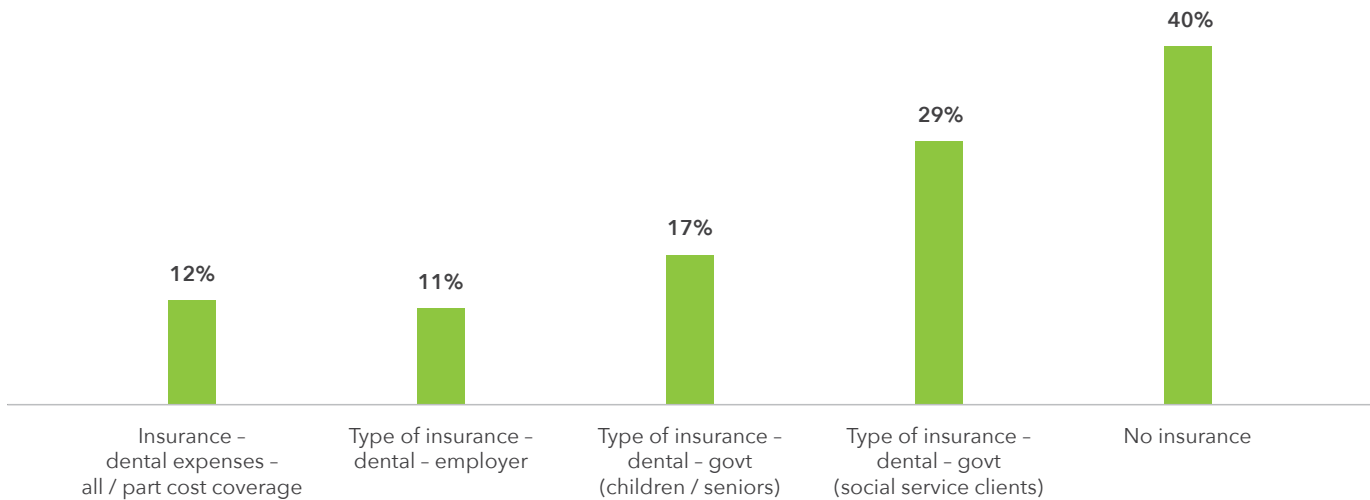
Regular visits to the dentist are important to maintain both oral and overall health. People who avoid going to the dentist are more likely to suffer severe health consequences in the future.

In Ottawa, almost a quarter of residents (24%) do not have dental insurance, and out of those without insurance, almost half (40%) avoided going to the dentist in 2017/2018 due to cost. This avoidance of dental services is unsurprising, considering the high costs of oral healthcare. In addition, the Consumer Price Index shows that over the last 20 years, the cost of dental care services have increased at nearly twice the rate of inflation (81% versus 41%) (see chart on page 21 for more details). This rate of increase is higher than every other subcategory except tobacco.

In contrast, only 12% of people with dental insurance in Ottawa avoided going to the dentist due to cost. People with insurance still avoid the dentist due to cost because many employers, whether public or private, cover only a portion of dental care, meaning that seeking treatment can still entail high costs for people with insurance.

Those with no insurance are most likely to avoid the dentist due to cost (40%), but government social assistance clients are also quite likely to avoid the dentist due to cost (29%), 2.5 times more likely than those with employer dental insurance (11%).

Percentage who avoided the dentist due to cost in previous 12 months, by insurance coverage, Ottawa, 2017/2018



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

The lack of preventative oral healthcare leads to emergency room (ER) visits and other costs

One of the primary impediments to expanding dental healthcare is cost. However, people without access to preventative oral healthcare inevitably develop other problems, which also entail high costs.

In 2015 in Ontario, 61,000 ER visits for dental problems cost the healthcare system \$31 million.³ The 6,149 ER visits in the Champlain Local Health Integration Network (LHIN) – of which Ottawa is part – contributed about \$3.2 million of this amount. While no local data was readily available, the St. Michael's Hospital in Toronto reported the average cost for a visit to their Emergency Room to see a physician about a dental emergency was at least \$513. In 2014, there were also 17,888 visits to physicians for dental problems in the Champlain LHIN, costing at least \$602,825 (based on a minimum cost to Ontario Health Insurance Plan (OHIP) of \$33.70 per 15-minute visit).

Beyond the direct costs of treating dental problems in physicians' offices and in emergency rooms, the failure to provide preventative oral healthcare also leads to long-term costs associated with all the other diseases and conditions that may develop because of poor oral health.

A 2014 Canadian study found that more than one in five Canadians were avoiding the dentist due to cost and the study discovered that these individuals "had more untreated decay, missing teeth, and reported having poorer oral health and oral pain more often" [than those who did not avoid the dentist due to cost].⁴

The study also demonstrated that reducing financial barriers to accessing oral healthcare could lead to a healthier and more productive society and could have significant economic benefits.⁵ They note that this would be achieved by reducing cardiovascular disease (which is closely connected to gum disease and poor oral health and costs the Canadian economy \$20.9 billion every year) and by limiting working hours lost due to dental pain (those researchers estimate 40 million working hours are lost annually in Canada due to dental pain), which results in more than \$1 billion in lost productivity per year.



Prevention, like in other areas of medicine, is a lot more cost-effective than treatment.

Interviewee from Ottawa



Why oral health is important

Oral diseases, including tooth decay and gum disease, are among the most common chronic diseases affecting millions of Canadians. Oral health is highly interconnected with overall health and wellness, and poor oral health makes it difficult for people to live healthy and fulfilling lives.

General physical health

Poor oral health is associated with higher rates of heart disease and respiratory illness, causes complications with diabetes,⁶ and has broad implications for quality of life. People who have no access to preventative oral health often develop serious conditions that need to be treated in hospital emergency rooms.

Mental health

Longitudinal studies have shown that oral health issues such as persistent pain trigger depression⁷ and that mental health issues can also contribute to poor oral health.⁸ Poor oral health reduces self-confidence and can make it harder for people to socialize.⁹ People with severe mental illnesses are 2.7 times as likely to lose all their teeth compared to the general population.¹⁰

Education

Students with poor oral health have lower attendance, lower grades, and higher odds of dropping out.¹¹ Schools across Ontario screen students for oral health problems, and students from marginalized communities are more likely to have oral health problems. Approximately 26,000 students were screened by Ottawa Public Health hygienists in 2014/2015: 9% were identified as having dental needs, and 5% with urgent treatment needs.¹²

Employment

Dental pain leads to lower productivity and higher absences from work,¹³ while poor oral health can make it more difficult for people to get a job,¹⁴ and employment programs with added oral health components have seen better employment outcomes.¹⁵

The rise of precarious jobs without dental insurance poses a major risk to the oral health of Canadians, especially those from marginalized communities.

Food security

Low-income Canadians and the working poor struggle to buy healthy food, and therefore are at risk of poor oral health. More than a third of food insecure individuals in Ontario report frequent discomfort eating food.¹⁶

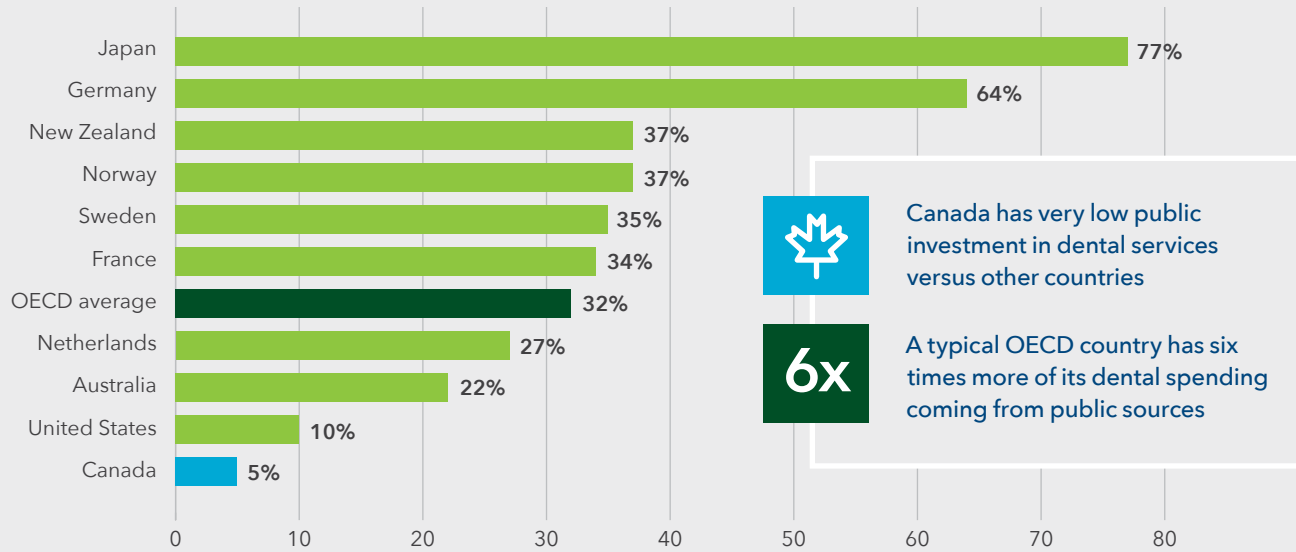
Connection with affordable housing

For many Canadians, housing costs have taken an increasing percentage of income,¹⁷ meaning they have less money to spend on their oral health. As rent and mortgage costs continue to soar across Ottawa, the inability of many people to attend to their oral health will most likely increase.



Canada and Ontario have underinvested in oral health

Percentage of dental spending from public sources, select OECD countries, 2013



Source: Dentistry in Alberta: Time for a Checkup?¹⁸

The story of oral healthcare in Canada, and in Ontario specifically, is one of chronic underinvestment.

Canadians are generally proud of our universal healthcare, but dental care is one of the major omissions of the system.

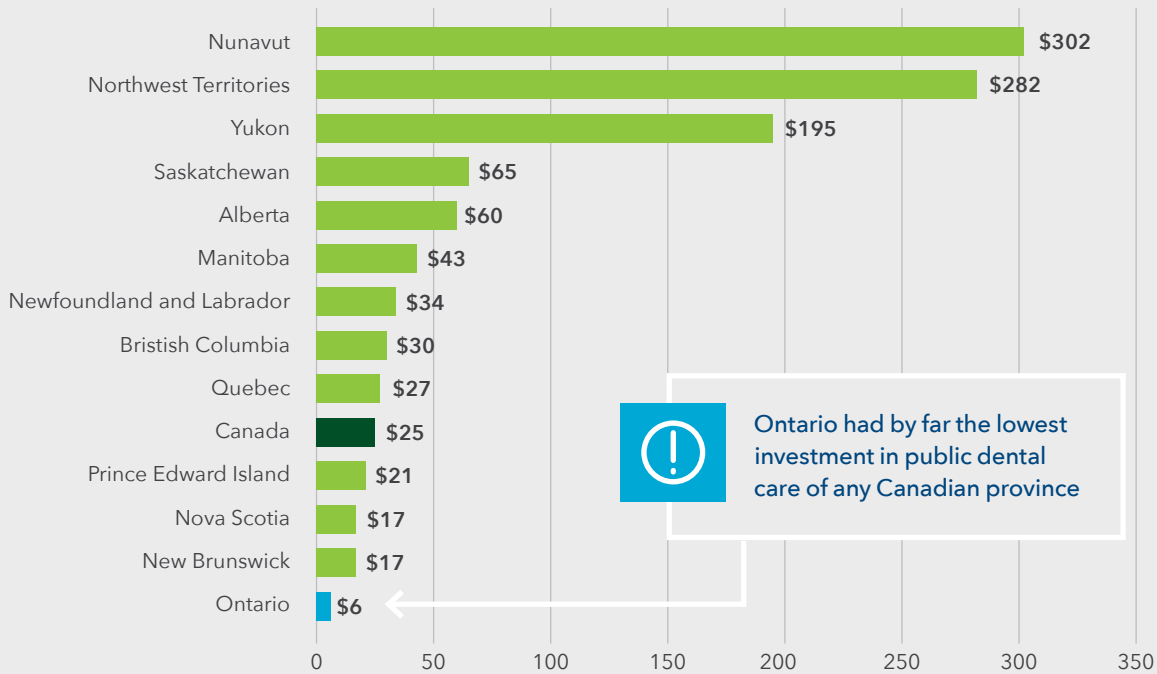
Canadians like to compare our healthcare to the more private American system favourably, yet only 5% of dental spending in Canada comes from public sources, compared to 10% in the US.

When comparing Canada's public investment in dental care with other high-income countries, the picture becomes even bleaker. In OECD countries, an average of 32% of dental spending comes from public sources, and this figure is significantly higher in both Germany (64%) and Japan (77%).

Per capita spending on dental care also differs widely across Canada. The three territories (Nunavut \$302, Northwest Territories \$282, and Yukon \$195) each spend significantly more than any of the provinces. The Canadian average is \$25, and the prairie provinces are all significantly above average.

Canada and Ontario have underinvested in oral health

Per capita public dental care expenditure in Canada, by jurisdiction, 2017, current dollars



Source: Dentist in Alberta: Time for a Checkup?¹⁹

In 2017, Ontario spent only \$6 per capita on oral healthcare, less than half of New Brunswick (\$17), which had the second lowest spending. While the implementation of new programs such as the Ontario Seniors Dental Care Program in 2019 have boosted this spend somewhat in recent years, Ontario still lags behind other provinces in its

public investments in oral health. Ontario is by far the most populous Canadian province and accounts for more than a third of the country's population. The fact that public spending in Ontario is so low means that millions of Canadians live without comprehensive coverage.

Oral health, affordability, and dental insurance in marginalized communities

Overall oral health

Food insecure households report the lowest oral health of any segment we analyzed in the CCHS. For example, in Ottawa, only 50% of severely food insecure households and 47% of moderately food insecure households rated their oral health as excellent or very good, compared to 67% of food secure households. In general, low income was also

a strong predictor of lower than typical oral health, with those individuals with an annual household income of less than \$20,000 reporting the worst oral health. In contrast, those with annual household incomes above \$80,000 per year had better-than-typical oral health. Recent immigrants and renters also tend to have particularly poor oral health.

Although 76% of Ottawa residents have dental insurance, certain groups of people are far more likely to lack insurance, avoid going to the dentist due to cost, and to rate their oral health as poor.

Only six groups of people are doing better than average for oral health and access to dentistry:

- 1 Canadian-born residents
- 2 Those who are food secure
- 3 White residents
- 4 Homeowners
- 5 Households with incomes above \$80,000
- 6 Children aged 12-18



Conversely, other groups are more likely to lack insurance and have poor oral health. The following pages will look at the realities faced by these eight groups:

- 1 Racialized people
- 2 Immigrants
- 3 Indigenous peoples
- 4 Seniors
- 5 Food insecure individuals
- 6 Renters, the precariously housed, and homeless individuals
- 7 Low-income residents
- 8 People with disabilities



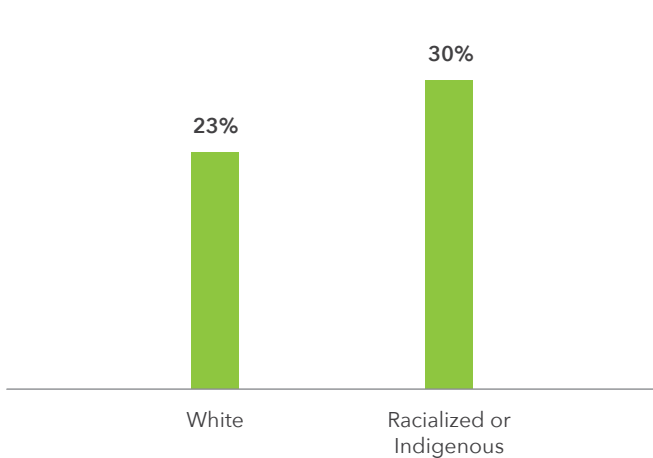
Racialized people and immigrants are far less likely to have dental insurance

About one quarter (24%) of Ottawa residents do not have dental insurance. However, racialized residents (including Indigenous peoples) are more likely to not have insurance (30%) compared to white residents (23%).²⁰ This points to how expanding dental coverage could play an important role in advancing racial equity in the region. 23% of racialized residents avoided the dentist due to cost in the last year, compared to 17% of white residents.

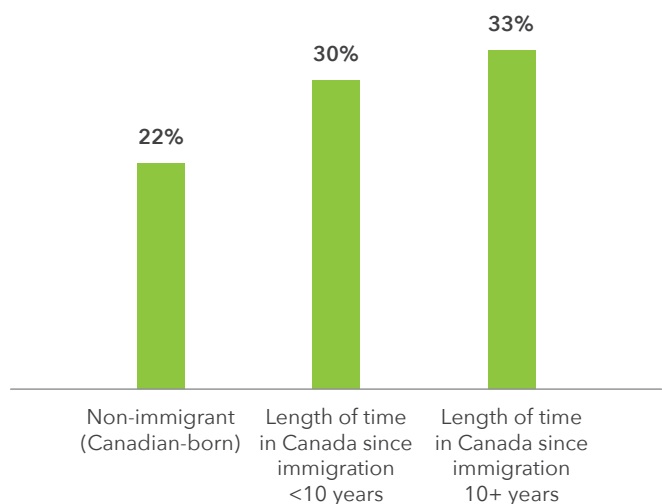
Immigrants to Ottawa are also more likely to lack dental insurance (31% of immigrants overall) than Canadian-born residents (22%).

Lack of dental insurance compounds with other challenges faced by newcomers, including low wages, language barriers, and limited knowledge of available services. 25% of immigrants to Ottawa avoided the dentist due to cost (compared to 17% of Canadian-born residents).

Percentage without dental insurance, by racialized status, Ottawa, 2017/2018



Percentage without dental insurance, by immigration status, Ottawa, 2017/2018



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

Oral health in Indigenous communities

More than 70% of Indigenous peoples in Ontario live in urban areas, but existing data sources often do not accurately represent the Indigenous population.²¹ For example, a study of the Indigenous population in Toronto found that the 2011 Canadian census underestimated the size of the Indigenous population in Toronto by a factor of two to four.²²

Our Health Counts is a research initiative, run by Well Living House and Seven Generation Midwives Toronto, that has been addressing these data gaps through an inclusive community-driven survey for Indigenous peoples in several Ontario communities. Although data is not available for Ottawa, the case of Toronto can provide some insight.

Our Health Counts found that Indigenous adults in Toronto have significantly poorer oral health than the general Canadian population.²³ Only 54% of Indigenous adults in Toronto rate their oral health as good, very good, or excellent, compared to 85% of Canadian adults. In addition, about half of Indigenous adults had seen a dentist in the last year, compared to three-quarters of Canadian adults.

Indigenous children (aged six to 11 years) are more likely to have received dental care within the past year (83%) than adults, but this still lags behind the 91% overall rate for Canadian children cited in the study. Further, 13% of Indigenous children between two and 14 years of age in Toronto have been affected by baby bottle tooth decay.

A 2011 study found that the prevalence of early childhood caries (or tooth decay) in three- to five-year-old First Nations and Inuit children was 85%. The prevalence of severe early childhood caries was as high as 25%, a much higher rate than the general public.²⁴

Poor oral health in Indigenous populations is concerning considering the link between poor oral health and other health issues such as

diabetes, heart disease, and respiratory ailments that disproportionately impact Indigenous communities.²⁵

In Ottawa, the provincially-funded dental clinic at the Wabano Centre for Aboriginal Health was opened in 2017 in partnership with Ottawa Public Health. The clinic had over 1,100 visits from 500 Indigenous patients in its first year of operation.²⁶

Poor oral health and the legacy of colonialism and residential schools

Before 1979, despite treaty promises of healthcare, the federal government made little effort to provide quality dental care to Indigenous peoples. The provided treatments were inadequate, and Indigenous peoples had much lower rates of dental provision and higher levels of tooth extractions than non-Indigenous peoples, which has had ongoing consequences for their oral health.²⁷ Survivors told the Truth and Reconciliation Commission of Canada that the little dental care they did receive in schools was both rushed and painful.²⁸ Those in residential schools sometimes experienced multiple teeth extractions without anesthetic, and dentures were not provided.²⁹

Non-Insured Health Benefits

The federally-funded Non-Insured Health Benefits (NIHB) program was introduced in 1979 and provides eligible First Nations and Inuit peoples a range of health benefits not covered by provincial programs, including dental care.³⁰ About 300,000 people annually receive oral health services through the NIHB.³¹

A 2017 Auditor General report echoed other research and found that “First Nations and Inuit populations had nearly twice as much dental disease and more unmet oral health needs compared with other Canadians.”³² The report also found that the government “did not know how much of a difference it was making to Inuit and First Nations people’s oral health. Despite knowing for many years about the poor oral health of Inuit and First Nations people, the Department had never finalized a strategic approach to help improve it.”

The Auditor General’s report underscores how, in the words of academics Catherin Carstairs and Ian Mosby, the “the Non-Insured Health Benefits (NIHB) Program constantly frustrates both patients and service providers, remains inefficient and inconsistent and fails to address the underlying causes of poor oral health among Indigenous people.”³³

Seniors in Ottawa have low rates of dental coverage

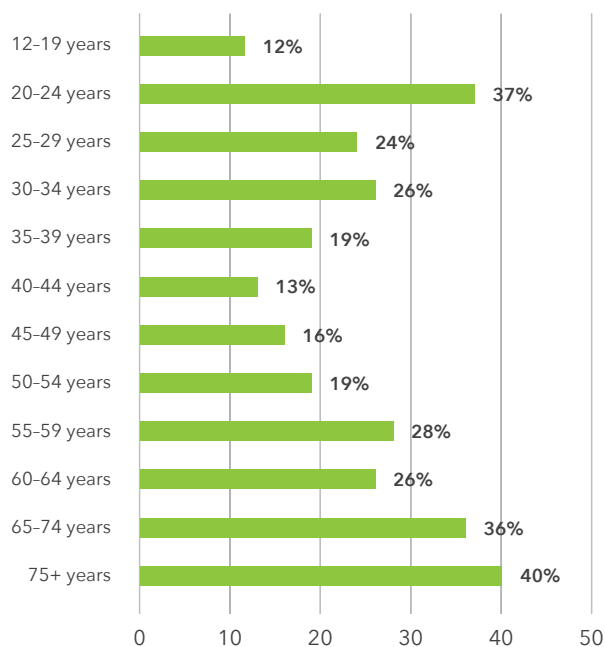
Seniors in Ottawa have very low dental insurance coverage rates, partly explained by a lack of employer-sponsored plans after retirement. This is a problem that threatens to worsen as the population ages. The number of people aged 65 and over is expected to increase by 44% between 2018 and 2025, and approximately 18,000 of these seniors (9.4%) will be living on low incomes.³⁴

In 2018, at its four dental clinics, Ontario Public Health (OPH) treated 892 seniors covered under various income support programs.³⁵

Ottawa Public Health also has a dental outreach team consisting of three dental hygienists who visit 14 local Community Health and Resource Centre (CHRC) locations to conduct dental screenings and provide information about the various available programs. In 2018, 578 seniors were screened, and 363 (63%) had urgent treatment needs. Of these seniors, 177 were placed on the City’s Older Adult Plan, which allowed them to receive treatment, while others were placed on a waitlist if they did not have other sources of funding.³⁶

The number of emergency room visits by seniors in Ottawa almost doubled from 114 in 2012 to 214 in 2017.

Percentage without dental insurance, by age, Ottawa, 2017/2018



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

In 2019, Ontario launched the Ontario Seniors Dental Care Program, which provides free dental care for low-income seniors. Since the program’s launch, over 50,000 seniors from across the province have enrolled in the program,³⁷ out of a total of 2.5 million seniors,³⁸ which is approximately 2% to 3% of seniors.

Income thresholds were revised in August 2021, and single Ontarians aged 65 and older with annual incomes under \$22,200 will be eligible for coverage under the program. Couples with combined annual incomes under \$37,100 will also be eligible. As a result of these changes, 7,000 more seniors will be able to access the program.

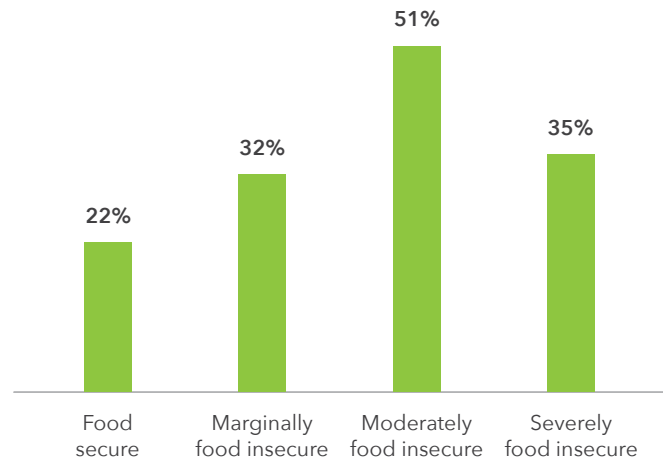
Although the Ontario Seniors Dental Care Program is an important step in expanding coverage for a group often lacking insurance, the income thresholds mean that most seniors across the province still lack insurance.

Many food insecure Ottawa residents struggle to access dental care and find it uncomfortable to eat

Food insecure individuals have much lower rates of insurance and worse oral health outcomes compared to people who are food secure. Out of all the segments for which we had data, food insecure individuals reported the worst oral health. The severely food insecure and the moderately food insecure both had low dental coverage rates, often avoided the dentist due to cost, and had very low dental insurance rates. And even when they did have insurance coverage, it was more likely to be paid out-of-pocket or through a government assistance program that provided oral health benefits, instead of provided through their employer. Many were not eligible for government programs, and thus could not afford dental services, even though their incomes were deemed too high to receive support from the government.

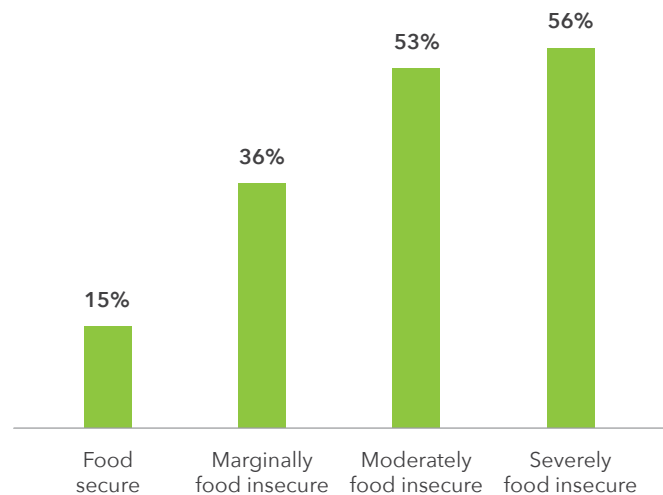
During the pandemic, food insecurity has soared, and the Ottawa Food Bank saw a surge in demand. In an interview with CTV News Ottawa in October 2021, CEO of the Ottawa Food Bank Rachael Wilson stated that usage had increased by 17% during the pandemic.³⁹ Even more troubling is that food bank usage often fails to capture the reality of food insecurity, as only 21% of food insecure Canadians use food banks.⁴⁰ The Ottawa Food Bank also noted the need for deliveries had increased by 40% during the pandemic.

Percentage without dental insurance, by food insecurity status, Ottawa, 2017/2018



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

Percentage of respondents who avoided going to the dentist due to cost in the previous 12 months, by food security status, Ottawa, 2017/2018



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

More than a third of food insecure individuals in Ontario report frequent discomfort eating, according to data from the 2017/2018 CCHS. Almost one in five (18%) of severely food insecure Ontarians report finding it often uncomfortable to eat due to problems with their mouth, a rate five times higher than food secure individuals.

A 2009 Canadian study also found that “Food insecure working poor persons reported relinquishing goods or services in order to pay for necessary dental care.”⁴¹

Research in the United States has shown a link between food insecurity and untreated dental caries among children, and the researchers identified four potential explanations:⁴²

- 1** Food insecurity may force caregivers and children to make food-purchasing decisions that optimize for quantity rather than quality (for example, sugar-sweetened beverages).
- 2** Food insecure households may live in food deserts, or neighbourhoods where purchasing options are limited to convenience stores, corner markets, and fast-food restaurants.
- 3** Children living in food insecure households may take responsibility for managing food resources, for example, by eating smaller amounts more frequently to make food last longer.
- 4** Food insecurity may be a proxy for other markers of social inequality and deprivation, including low social capital and biological stress, both of which are associated with caries in children.

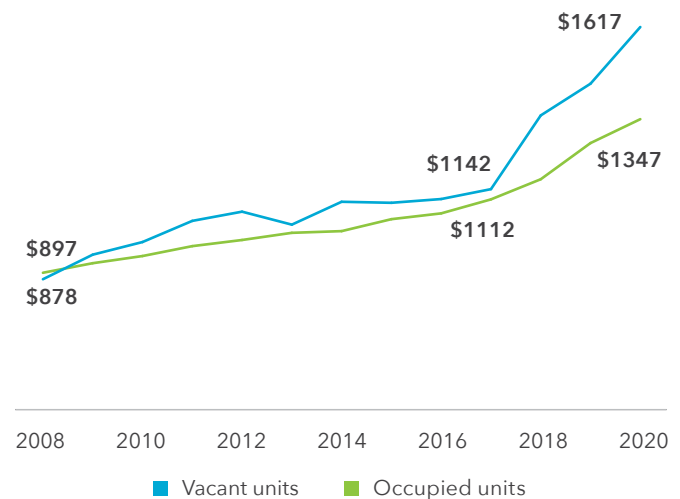
Oral health and housing status

Renters in Ottawa were 1.5 times as likely to not have dental insurance (32% versus 21%). Renters were also almost twice as likely to avoid the dentist due to cost in the previous 12 months in Ottawa (28% versus 15%) and 14% of renters had not been to the dentist for at least 5 years, compared to 3% of home owners.

These trends have risk of getting worse for both renters and owners.

For renters, the going rent for vacant units available to new renters has increased by 42% from October 2017 to October 2020, according to data from CMHC, a greater percentage increase than in the previous decade. Home prices have surged even further, so that both new home buyers and renters alike will face growing financial burdens that will have a downstream impact on their ability to afford things like dental care, a trend that will likely accelerate over time.

Cost of rent for vacant and occupied units, Ottawa Census Metropolitan Area, 2008 to 2020



Source: Canada Mortgage and Housing Corporation Rental Market Surveys. Data is from October of each year.

Homelessness in Ottawa

No data is available on homeless populations or the precariously-housed in the Canadian Community Health Survey. Past Canadian studies in other communities suggest that essentially all homeless people have untreated oral health issues.

For example, a 2013 study found that 97% of people in Toronto shelters required dental treatment (compared to 34% of the general population) and that 35% of them had not visited a dentist in the last four years.⁴³

The study also found that 42% sometimes or often find it uncomfortable to eat because of mouth problems, and 35% sometimes or often do not eat because of these problems.

The researchers also conducted clinical exams, and they found tooth decay or the need to replace existing defective fillings in 88% of the participants, compared with only 16% of the general population.

The Ottawa Mission is providing dental care to homeless people in Ottawa

The Ottawa Mission's clinic at Daly Avenue has been operating since 2007, but had to close its doors



Studies that I've read have shown that people want to be served where they already get other services, especially homeless clients. They feel more comfortable, they've already got the relationships, and they feel comfortable with the group that they're with.

Interviewee from Ottawa



temporarily in March 2020 due to the pandemic.⁴⁴ The clinic has one hygienist on staff and relies on volunteer dentists. Due to the clinic's temporary closure, many clients had to go to emergency rooms for treatment. In 2018-2019, the clinic served 579 patients.⁴⁵ The clinic has over 100 volunteers and is Canada's largest volunteer dental clinic for the poor and homeless. The Mission clinic has donated over \$2 million in free dentistry and has seen over 10,000 patients.⁴⁶

The working poor are even less likely to have insurance than the poorest Ottawa residents

Since dental insurance is usually obtained as an employment benefit, it is unsurprising that higher income households are more likely to have coverage, and households making less than \$40,000 are much less likely to have insurance.

What is perhaps counterintuitive is that households earning between \$20,000 and \$40,000 are less likely to have insurance than households earning less than \$20,000. This is because people without incomes or extremely low incomes often qualify for the limited public dental programs. However, the working poor often make too much money to qualify for these government benefits, yet they usually work precarious jobs that offer no dental insurance or other benefits.



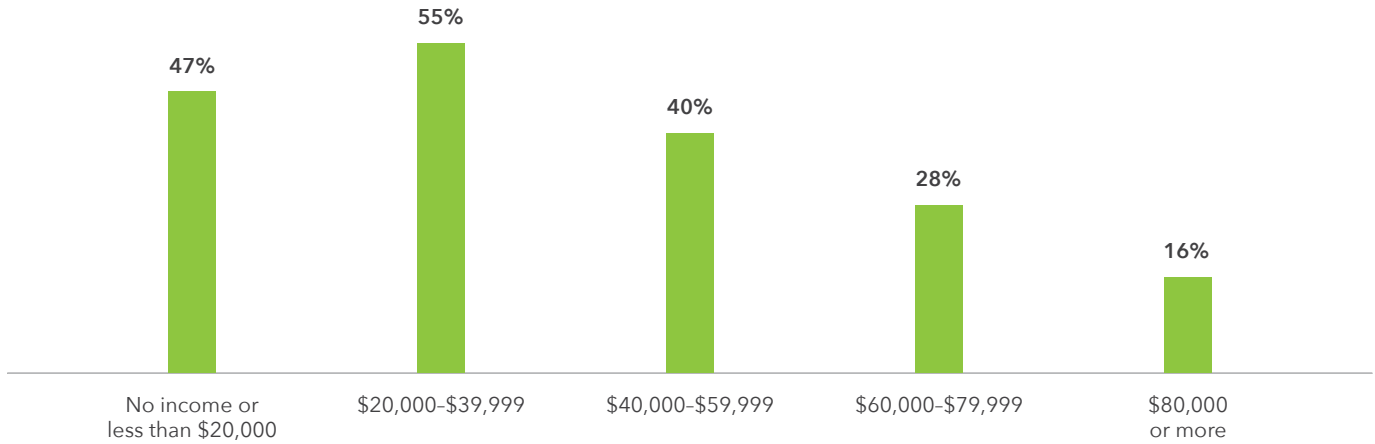
We typically see that there is some coverage for low-income adults and seniors, especially in Ontario where there is a new program for seniors now. But there are always those just above the threshold who do not get access to care but still cannot afford to pay out of pocket. That's something we see a lot of.

Interviewee from Ottawa



Those with household incomes below \$40,000 - and those most in need of support - are by far the least likely to have coverage.

Percentage without insurance, by annual household income, Ottawa, 2017/2018



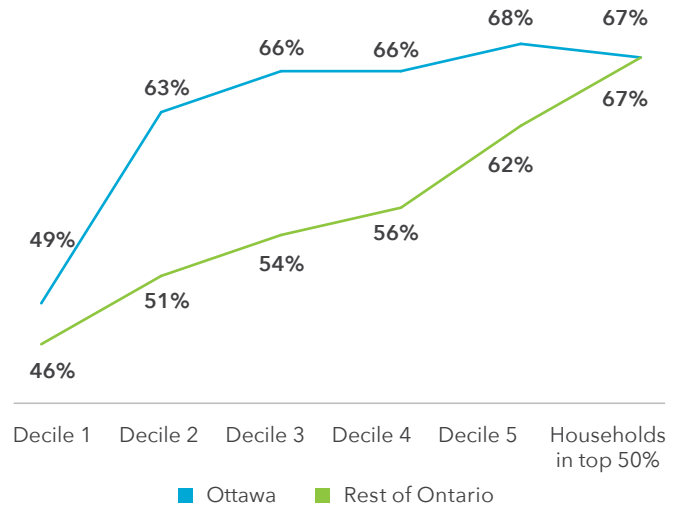
Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

Many low-income residents in Ottawa tend to be doing better than the rest of Ontario, but those in the bottom 10% are struggling as much as the rest of Ontario

67% of households in the top 50% of the income distribution in Ottawa rate their oral health as excellent or very good, which is the same percentage as the rest of Ontario. Ottawa residents in the 10th to 50th income percentiles have better self-perceived oral health compared to the rest of the province.

However, less than half of Ottawa residents (49%) in the bottom 10% by household income have excellent or very good oral health, which almost matches the number in the rest of province (46%). This shows that while many Ottawa residents have better oral health than people in the rest of the province, the lowest-income residents are still struggling.

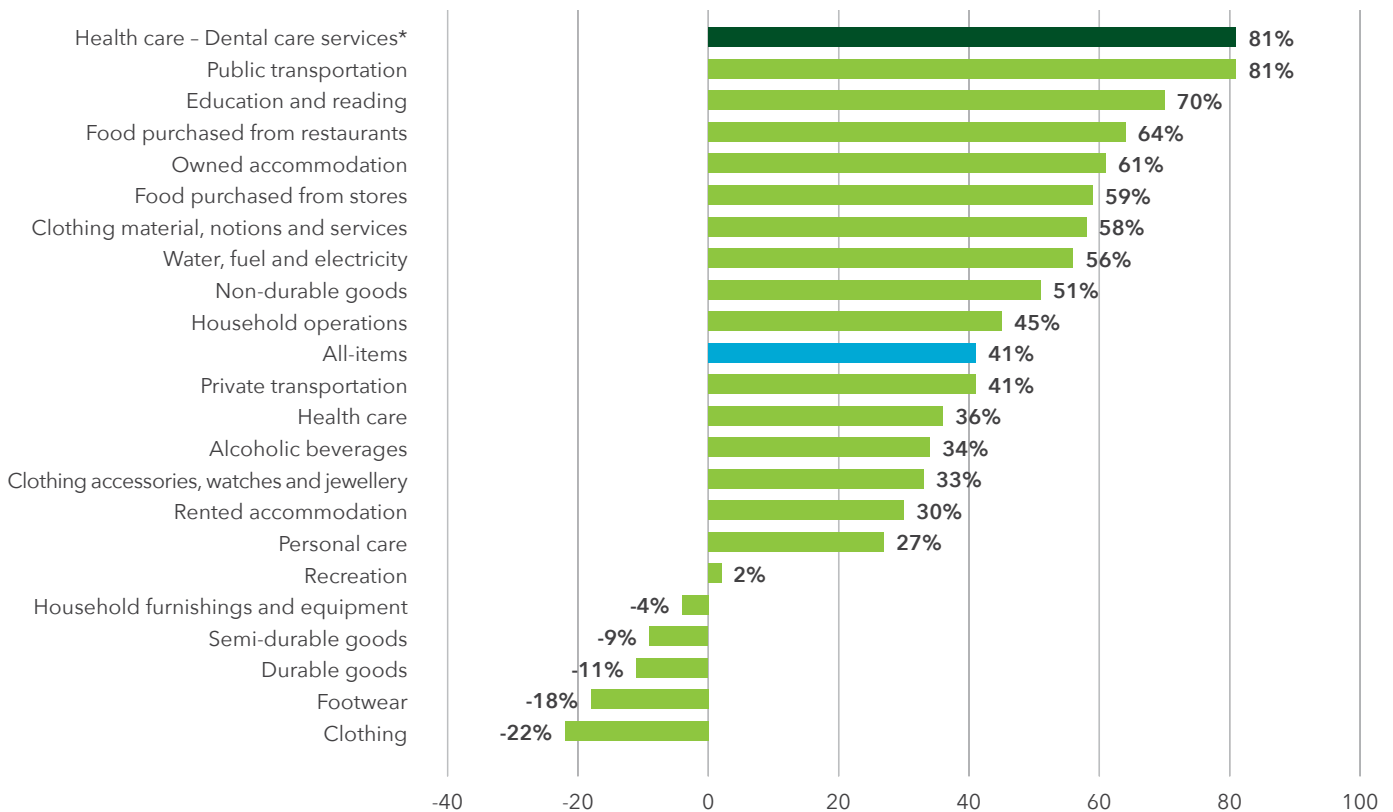
Percentage who perceive their oral health as "excellent" or "very good", by household income distribution, Ottawa, 2017/2018



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

Dental care is increasing in cost faster than nearly every other type of cost

Consumer Price Index, 2001-2020, all subcategories of inflation*, Ontario



Source: Statistics Canada. Table 18-10-0004-01 Consumer Price Index, monthly, not seasonally adjusted.⁴⁷

Note: Data in the chart reflects every subcategory of the consumer price index, excluding tobacco, which increased by more than 250%. Dental care services are one of the subcategories of the consumer price index under healthcare – which has increased at slightly less than the cost of inflation overall – and reflects a different level of the hierarchy than the rest of the items in the chart above. The data for dental care services is at the national level since it is not available at the provincial level or below.

From 2001 to 2020, the costs for dental care services have grown by 81%, twice as fast as inflation overall at 41%. This inflation rate is extremely high, exceeding nearly every other category of good and services.

With the onset of the pandemic, cost inflation has only gotten worse. From March 2020 to September 2021, the Canadian Consumer Price Index showed inflation of 3.4% for all items excluding gasoline, while dental care services grew by 7.1%, more than twice the overall rate of inflation, and well beyond the historical rate of about 4% average growth per year.

People with disabilities

The 2017/2018 Canadian Community Health Survey asked respondents a series of questions to determine whether they had any difficulty with six functional health components: vision, hearing, mobility (walking or climbing steps), cognition, self-care, and communication. The Washington Group on Disability Statistics developed these questions. Although not comprehensive, the Washington Group questions cover the most common difficulties and allow for some understanding of the prevalence of functional difficulties in society. However, these questions do not cover the full range of disabilities, notably omitting mental health-related disabilities and learning disabilities. Because of these limitations, some of the Washington Group's questions have been abandoned by Statistics Canada, and others have been altered as part of the updated Disability Screening Questions.⁴⁸

In Canada, 38% of adult men and 40% of adult women have at least one functional difficulty, including 59% of male seniors and 60% of female seniors.⁴⁹



I think it's important to sensitize clinicians to a patient population that may not normally have access [to oral healthcare] or be able to understand their concerns initially, and it helps to break down barriers and stereotypes that they might have. We're tapping into their basic empathy and compassion.

Interviewee from Ottawa



People with functional difficulties are less likely to have dental insurance than people without functional difficulties. This is true for all categories of functional difficulty, but the difference is especially pronounced for people who have difficulty with self-care (38% of those with difficulties lack insurance compared to 24% of those without difficulties with self-care) and people who have difficulty walking or climbing steps (only 37% have insurance compared to 23% of those without this difficulty).

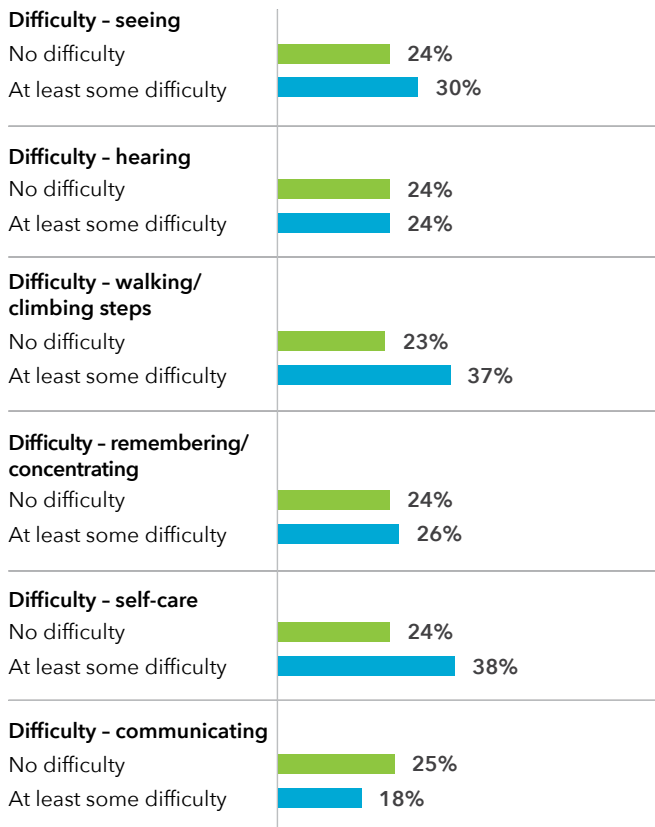
Similarly, people with functional difficulties have much lower self-perceived rates of oral health. This is especially true for people with difficulty with self-care, only 35% of whom rate their oral health as very good or excellent, compared to 65% of people without this difficulty.

We also know from other research that people with disabilities have greater poverty rates and often have trouble accessing oral healthcare.⁵⁰ Individuals with developmental disabilities have poor oral health compared to populations without intellectual disabilities, due in part to the inability to maintain adequate oral hygiene and difficulty accessing affordable and timely care. Oral health professionals also have limited training in treating the specific needs of people with developmental disabilities.

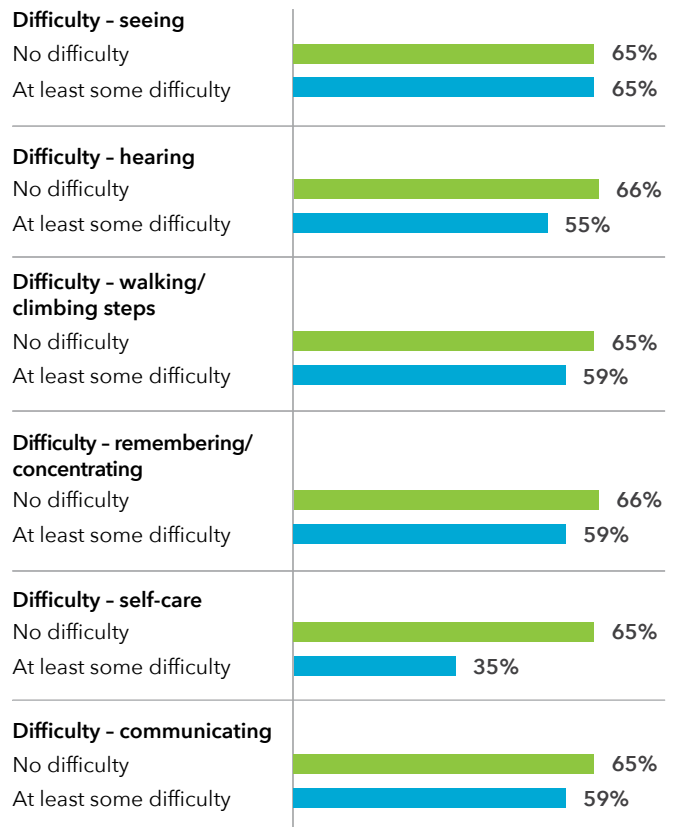
In Ontario, people receiving Ontario Disability Support Program: Income Support (ODSP) are eligible to receive basic dental services, though many report difficulty accessing these services because many dentists avoid taking patients covered under this benefit program. Spouses and dependent children are also eligible for coverage.

Data mentioned earlier in the report also notes that those in Ontario with insurance provided through government social assistance programs are more likely to avoid the dentist due to cost than those with other insurance providers.

Percentage of people without dental insurance, by functional difficulty category, Ottawa, 2017/2018



Percentage of people who perceived their oral health as excellent or very good, by functional difficulty, Ottawa, 2017/2018



Source: Canadian Community Health Survey, Public Use Microdata File, 2017/2018. Data reflects non-age standardized weighted numbers. Analysis by author.

Oral health of children in Ottawa

Children in Ottawa generally have better dental coverage than adults

Despite advances in prevention, early childhood caries (ECC) are among the most common childhood diseases and can be accompanied by serious comorbidities. ECC can require dental surgery under anesthesia, which is the most common day surgery procedure at most pediatric hospitals in Canada.⁵¹ Children with poor oral health also receive lower grades than other children and are more likely to miss school days.⁵² Children who immigrated to Canada are also likely to have worse oral health than their Canadian-born peers.

Children aged 17 years and younger living in low-income households across Ontario are eligible for free dental care through the Healthy Smiles Ontario program. A similar program does not exist for adults, meaning that children often have access to better dental care than adults and are at higher risk of developing oral health problems once they turn 18 and are no longer covered under the program. Between January 2016 and October 2017, more than 6,600 children and youth accessed treatment at Ottawa Public Health clinics, with approximately 21,000 visits.⁵³

Children (or whose families) who receive any of 1) temporary care assistance, 2) assistance for children with severe disabilities, 3) Ontario Works or 4) Ontario Disability Support are automatically enrolled in Healthy Smiles, and other children can be enrolled by contacting Ottawa Public Health or by applying online.

Screenings in schools

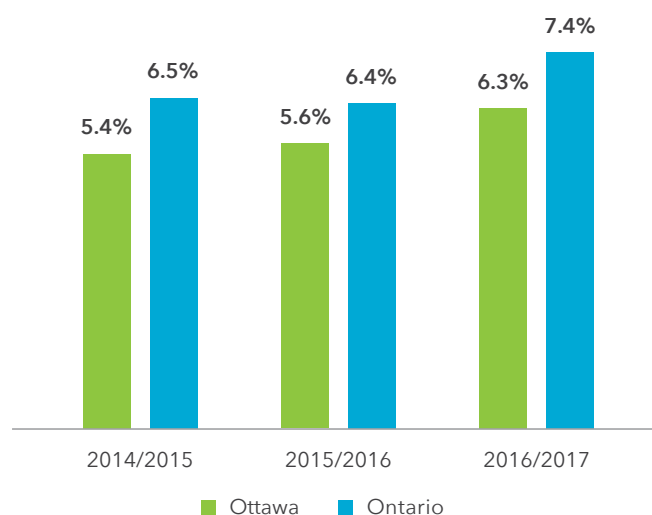
Dental hygienists and dental assistants from Ottawa Public Health are mandated by the province to conduct free dental screenings for elementary

schools across the city. Children in kindergarten may not have seen a dentist before these screenings, and students in Grade 2 have their first permanent molars. In both cases, dental screenings are an important step to ensure that children with oral health needs receive adequate care. In addition to all children in junior/senior kindergarten and Grade 2 being screened, screenings are also done for children in Grades 4, 6 and 8 at schools with higher levels of dental disease.

The dental teams assess needs for topical fluoride, scaling and other treatments and inform the parents or guardians on whether and how the children can access care. In 2017/2018, 33,926 students were screened in elementary schools by Ottawa Public Health staff.⁵⁴

The number of children with urgent treatment needs in Ottawa has increased from 5.4% in 2014/2015 to 6.3% (which is still under the provincial average of 7.4%).

School-based dental screening 2014 to 2017: percentage identified with urgent needs



Source: Ottawa Public Health.⁵⁵

Oral health and COVID-19

The pandemic has led to significant economic challenges which have negatively affected oral health in the region.

In addition, many public dental programs that serve the most vulnerable populations were operating at drastically reduced capacity due to the social distancing required by the pandemic.

Ottawa's four dental clinics were closed in September 2020, and the 42 staff working at these clinics were tasked with contact tracing, flu immunization and other tasks.⁵⁶ Alternative dental services were made available for OPH clients who were experiencing dental pain.

A public health official we spoke to in summer 2021 estimates that it will take four or five years to get through the oral health backlog from COVID-19.

A study in Qatar led by researchers at McGill University found that people with gum disease (periodontitis) experienced more severe COVID-19 symptoms.⁵⁷ According to the study, "the patients were 3.5 times more likely to be admitted to the intensive care unit, 4.5 times more likely to require a ventilator and 8.8 times more likely to die from COVID-19 compared to those without gum disease."

People have been putting off going to the dentist during the pandemic

According to a January 2021 poll conducted by Abacus Data for the Canadian Dental Hygienists Association, only 46% of Ontarians had seen their dental hygienist since March 2020, which was slightly higher than the national average of 43%.⁵⁸ The reasons cited for not receiving dental care included "putting off appointments that can wait" (37%), concerns about safety (32%), household finances taking a hit (14%) and loss of dental benefits (12%).

People aged 18 years to 29 years were most likely to have lost benefits (19%), and people making less than \$50,000 (18%) annually were also more likely to have put off appointments due to income loss.

The fact that "putting off appointments that can wait" was the top reason suggests that many Canadians are still unaware of the importance of routine oral healthcare.

Improving oral health infrastructure in Ottawa

Despite the gaps in Ontario's oral healthcare system, cities and regions have some tools to make dental care more accessible, and Ottawa has some successes and opportunities on this front.

Community organizations and clinics serving low-income residents

The following organizations provide either free or low-cost dental treatments. Because these organizations have experience running dental health programs, they could potentially quickly scale up.

Algonquin College Dental Clinic

The clinic offers preventative services for both adults and children. Clients who have undergone preventative services at the clinic are also eligible for restorative services at 50% of the Ontario Dental Association's current fee guide.

Canadian National Institute of Health

The dental hygiene program runs a clinic offering free cleanings, fluoride, polish, and x-rays for both adults and children.



I think it would be wonderful to empower organizations that already have a dental program embedded in them and give them the opportunity to partner with larger centres, but keep it protected within their own.

Interviewee from Ottawa



La Cité

Ottawa's French-language college offers a low-cost dental clinic offering dental exams, x-rays, and cleanings for between \$25 and \$50. Other treatments are available for additional costs.

Ottawa Mission Dental Clinic

The Ottawa Mission's clinic at Daly Avenue has been operating since 2007 but had to close its doors temporarily in March 2020 due to the pandemic.⁵⁹ The clinic has one hygienist on staff and relies on volunteer dentists. In 2018/2019, the clinic served 579 patients.⁶⁰ The clinic is Canada's largest volunteer dental clinic for the poor and homeless and has donated over \$2 million in free dentistry and has seen over 10,000 patients.⁶¹

Ottawa Public Health (OPH)

OPH runs four dental clinics for eligible residents and works on health promotion and prevention. OPH also reaches 91% of Ottawa residents through community water fluoridation.

Wabano Centre for Aboriginal Health

Wabano has a unique Model of Care that places Indigenous culture at the centre of its treatment and services. The Centre runs a dental clinic on Mondays and Thursdays from 9am-5pm. In 2017, there were 1,125 visits to the dental clinic.⁶²



If we look at how Medicaid pays dental care in the US, it's based on income. Medicaid would pay a certain percentage based on income, and at a certain point, the patient gets 100% of the cost paid. If you have a somewhat higher income, you may only get a percentage of your costs covered. That makes a lot more sense than a hard cut-off like we use in Ontario. We don't see a graduated income method in any publicly funded program in Ontario, and I'm not aware of any in Canada.

Interviewee from Ottawa



Recommendations and options

The problem of access to affordable, equitable oral healthcare is complex, and many of the public health policies needed to effect real change rest with the provincial or federal governments. And though ongoing provincial and federal advocacy for improvements to oral healthcare remain critical, there are still significant and meaningful actions that can be taken at the local and regional level to move the needle on oral health outcomes here in Ottawa.

The largest challenge that needs to be addressed is ensuring access to oral healthcare for low-income adults who do not have insurance or who do not qualify for government support. While there is still a lot of room for improvement with respect to children's oral health, both youth and seniors across the province are now more likely to have access to dental care due to public program expansions across Ontario in recent years.

The people who are left behind are those low-income individuals without insurance, who may also experience compounding factors such as food insecurity, precarious employment and skyrocketing housing costs, and for whom the cost of dental care remains far out of reach.

A few opportunities for overall oral healthcare improvement include:

- Establishing a network of individuals working in dental health across Ottawa who would be willing to partner with Ottawa Public Health and local organizations to provide low-cost or free dental care to low-income and marginalized people.
- Providing support to existing organizations working on oral health, such as those profiled in the previous sections.
- Work to inform the provincial and federal government of local challenges and the need to expand dental coverage across communities, especially for low-income residents.
- Educate and encourage businesses to include dental benefits in employment packages for lower-income workers.
- Providing funding for oral health research to better understand the prevalence and causes of poor oral health and its impact on overall physical and mental wellbeing.
- Prioritizing regular data collection to better understand the state of oral health within the region and inform decision-making.
- Advocating for the expansion of public programs, providing oral healthcare to vulnerable populations.

“

I would say that in terms of long-term impact, your greatest focus or area of impact could be on the younger individuals that we work with. [...] They have many years ahead of them, and they also have many years of dental emergencies ahead of them that could be curbed.

Interviewee from Ottawa

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