# Report to Rapport au:

Ottawa Board of Health
Conseil de santé d'Ottawa
9 November 2015 / 9 novembre 2015

Submitted on November 2, 2015 Soumis le 2 novembre 2015

Submitted by
Soumis par:
Dr. / D<sup>r</sup> Isra Levy, Medical Officer of Health /
Médecin chef en santé publique

# Contact Person Personne ressource:

Dr. / D<sup>r</sup> Aaron Burry, Dental Officer of Health / Dentiste-hygiéniste
Ottawa Public Health / Santé publique Ottawa
613-580-2424, ext./poste 23666, Aaron.Burry@ottawa.ca

Ward: CITY WIDE / À L'ÉCHELLE DE LA File Number: ACS2015-OPH-CP-0001

VILLE

SUBJECT: UPDATE ON DENTAL HEALTH SERVICES IN OTTAWA

OBJET: MISE À JOUR SUR LES SERVICES DE SANTÉ DENTAIRE À OTTAWA

## REPORT RECOMMENDATIONS

That the Board of Health for the City of Ottawa Health Unit receive this report for information.

# RECOMMANDATIONS DU RAPPORT

Que le Conseil de santé de la circonscription sanitaire de la ville d'Ottawa prenne connaissance du présent rapport à titre d'information.

#### **EXECUTIVE SUMMARY**

Poor oral health is linked to respiratory infections, cardiovascular disease, diabetes and bone-related and inflammatory conditions in seniors. In addition to the health impacts, it is estimated that there's an annual loss of 2.26 million school-days and 4.15 million working days due to dental visits or dental sick days in Canada.

Furthermore, socio-economic factors determine dental care utilization and are associated with poorer dental health outcomes. Specifically, lower income families and those with no insurance report that they are three to four times more likely not to obtain dental care than higher income Canadians. In Ottawa, only 42 per cent of those living below the low income cut-off have dental insurance. In addition, Aboriginal peoples living off reserve tend to have poorer dental health than non-Aboriginals. Approximately 30 per cent of Aboriginal children under six have a dental problem and Aboriginal adults are nearly twice as likely to have untreated dental cavities (34 cent) compare to non-Aboriginal adults (19 per cent).

To reduce the burden of poor oral health in Ottawa, Ottawa Public Health (OPH) provides comprehensive dental health services including promotion, prevention and treatment. OPH work includes the coordination of five provincially funded programs: Healthy Smiles Ontario; Children in Need of Treatment; Ontario Works; Ontario Disability Support Program (discretionary items) and public health unit preventive services under the Ontario Public Health Standards.

In 2016, OPH will work with the province to integrate multiple publically funded programs into a new, integrated, Healthy Smiles Ontario program. In December 2013, the provincial government announced its intent to integrate oral health programs and/or benefits for children and youth from low-income families into one new program to be launched on January 1, 2016. In this new integrated program, key public health roles/activities will be preserved and public health units will continue to identify children in need of emergency and essential care and assist them to access dental treatment.

In addition, OPH will continue work to establish a dental clinic at the Wabano Centre for Aboriginal Health that will provide treatment and prevention services care to Aboriginal children, youth and adults as well as outreach in the broader Aboriginal community. In September 2015, the Ministry provided on-going 100 per cent provincial base funding to support operations for this dental clinic. As a result, OPH recommended that City Council, through the Board of Health, approve the creation of five new full-time equivalent positions for clinic staff who would work at the clinic to provide treatment and prevention services care.

Looking ahead, OPH will continue to provide dental health promotion, prevention and treatment services, while adapting to a new integrated Healthy Smiles Ontario model and launching the Wabano clinic, to ensure that eligible Ottawa residents continue to receive accessible public health dental services.

# RÉSUMÉ

Une mauvaise santé bucco-dentaire est associée à des infections respiratoires, à des maladies cardio-vasculaires, au diabète, à des maladies des os et à des maladies inflammatoires chez les personnes âgées. De plus, on estime que chaque année, environ 2,26 millions d'absences à l'école et 4,15 millions au travail sont le fait de visites chez le dentiste ou de congés de maladie liés à la santé dentaire.

Certains facteurs socioéconomiques peuvent avoir une incidence sur le recours aux soins dentaires et être à l'origine d'une mauvaise santé dentaire. Plus particulièrement, les familles à faible revenu et celles qui n'ont pas d'assurances sont trois à quatre fois moins susceptibles de déclarer obtenir des soins dentaires que les Canadiens au revenu plus élevé. À Ottawa, seulement 42 % des personnes vivant sous le seuil de faible revenu ont une assurance dentaire. Pour leur part, les Autochtones qui vivent hors réserve ont tendance à avoir une moins bonne santé dentaire que les non-Autochtones : environ 30 % des enfants autochtones de moins de six ans ont un problème dentaire, et les adultes autochtones sont presque deux fois plus susceptibles d'avoir des caries dentaires non traitées (34 %) que les non-Autochtones (19 %).

Pour améliorer la santé bucco-dentaire des résidents d'Ottawa, Santé publique Ottawa (SPO) offre des services complets de promotion, de prévention et de traitement et coordonne cinq programmes financés par le gouvernement provincial : Beaux sourires Ontario, le Programme de soins dentaires pour enfants, Ontario au travail, le Programme ontarien de soutien aux personnes handicapées (prestations discrétionnaires) et les services de prévention dans les bureaux de santé publique dans le cadre des Normes de santé publique de l'Ontario.

En 2016, SPO collaborera avec le gouvernement provincial pour intégrer plusieurs programmes financés par les fonds publics à une nouvelle mouture, mieux harmonisée, du programme Beaux sourires Ontario. Ce projet remonte à décembre 2013, lorsque le gouvernement a annoncé son intention d'intégrer les programmes et prestations de santé bucco-dentaire offerts aux enfants et aux jeunes des familles à faible revenu à un nouveau programme qui serait lancé le 1<sup>er</sup> janvier 2016. Le nouveau programme gardera en place les rôles et activités de premier plan, et les bureaux de santé publique

continueront à dépister les enfants qui ont besoin de soins dentaires d'urgence ou essentiels et à les aider à les obtenir.

De plus, SPO poursuivra son travail pour mettre sur pied une clinique dentaire au Centre Wabano pour la santé des Autochtones, laquelle offrira des services de traitement et de prévention aux enfants, aux jeunes et aux adultes autochtones et sensibilisera la communauté autochtone en général. Le Ministère a accordé en septembre 2015 un financement permanent entièrement provincial pour les activités de base de la clinique dentaire. Par conséquent, SPO a recommandé que le Conseil municipal approuve par l'entremise du Conseil de santé la création de cinq postes équivalents temps plein dont les titulaires offriront des services de traitement et de prévention.

Dans l'avenir, SPO continuera à offrir des services dentaires de promotion, de prévention et de traitement, s'adaptera au nouveau programme intégré Beaux sourires Ontario et inaugurera la clinique du Centre Wabano pour que les résidents d'Ottawa admissibles continuent de recevoir des services dentaires publics accessibles.

## **BACKGROUND**

# **Public Health Implications of Poor Oral Health**

Oral health is an important part of overall health and a determinant of quality of life. Poor oral health is linked to other diseases and serious health conditions, including respiratory infections<sup>2</sup>, cardiovascular disease<sup>3</sup>, diabetes<sup>4</sup> and bone-related and inflammatory conditions in seniors. Although the oral health of most Canadians has improved over the past 30 years, some groups continue to have limited access to dental services and as a result carry a higher burden of dental disease. Furthermore, it is estimated that there's an annual loss of 2.26 million school-days and 4.15 million working days due to dental visits or dental sick days. As with many diseases, oral health problems and oral cancer are more prevalent among those who experience barriers to accessing treatment whether financial, physical, socio-cultural or geographic.

In Canada, socio-economic factors determine dental care utilization and are associated with poorer dental health outcomes. The Canadian Health Measures Survey 2007-2009, reported that compared to higher income Canadian families, those from lower income families have almost two times worse oral health outcomes as measured by, among other things, the number of decayed (i.e. unfilled) and missing (due to disease) teeth among adults and the highest levels of build-up, stains, tartar and gingivitis. Lower income families and those with no insurance report that they are three to four times

more likely not to obtain dental care than higher income Canadians. Lower income Canadians face significant financial barriers to accessing dental health services. This is largely due to two factors: 50 per cent of lower income Canadians do not have any dental insurance, including workplace health insurance to cover dental services nor do they have the money to pay for out-of-pocket dental expenses.

Dental insurance and household income are related to people receiving dental service access in Ottawa. In Ottawa, while 70 per cent of the population have dental insurance, only 42 per cent of those living below the low income cut-off have dental insurance compared to 76 per cent of those living above the cut-off. People with dental insurance are more likely to see a dentist. Of those with dental insurance, 88 per cent typically see a dentist at least once a year compared to 59 per cent of those without dental insurance. Those without insurance are about five times more likely to use dental services only in an emergency (34 per cent) compared to those with insurance (seven per cent). Total household income shows a similar relationship: those living below the low income cut-off are more than three times more likely to use dental services only in an emergency (38 per cent) compared to those living above the cut-off (11 per cent). This situation is similar across Ottawa's peer health units.<sup>7</sup>

In Ottawa, people with dental problems who do not have access to dental services often go to hospital emergency departments. In 2014, there were 1,740 visits to Ottawa emergency departments for conditions that should have been managed in the community compared to 1,140 visits ten years ago.<sup>8</sup> Such conditions are sometimes called "ambulatory care sensitive dental conditions". They include problems such as dental cavities, eroded teeth and gingivitis.

The average cost for a visit to an emergency room to see a physician about a dental emergency is at least \$513. However the patient will only get pain killers, not treatment to solve the dental problem.

# **OPH Dental Health Programs and Services**

Under the Ontario Public Health Standards (OPHS) Child Health Program Standard there are four OPHS oral health components:

- 1. Oral Health Assessment and Surveillance: Population Health Assessment and Surveillance Protocol; Oral Health Assessment and Surveillance Protocol;
- 2. Disease Prevention: Children in Need of Treatment Protocol; Preventive Oral Health Services Protocol:

- 3. Health Protection: Protocol for the Monitoring of Community Water Fluoride; and
- 4. Health Promotion and Policy Development.

OPH, along with its community and City of Ottawa partners, has developed a model of dental programs and services (see document 1). This model of care is designed to decrease the burden of oral health problems in Ottawa and increase access to services for low-income residents and those without private dental insurance. OPH is one of the few organizations that provides comprehensive dental health services that encompass promotion, prevention and treatment for both adults covered under Ontario Works and children covered under various publically funded programs. For example, when children visit OPH clinics for treatment, OPH staff work with parents to increase their understanding of the causes of tooth decay such as the dental impact for young children sipping juice. Furthermore, staff demonstrate to parents good oral health habits and encourage parents to adopt better self care for their family. One US study showed that preschool-aged children who had an early preventive dental visit were more likely to use subsequent preventive services and experience lower dental health costs.<sup>9</sup>

# **Promotion and Prevention**

OPH provides oral health promotion in schools and to priority communities to increase knowledge about good oral health habits.

## Education

OPH works with Early Years Centres, English as a Second Language classes, and young parents groups, such as Emily Murphy and St. Mary's to provide education sessions for parents with young children to increase awareness of early childhood dental disease and how to avoid its causes. OPH also provides dental education sessions and dental supplies to OPH's Healthy Babies, Healthy Children (HBHC) staff to promote good oral health with families enrolled in the HBHC program.

## Screening

School Aged Children - OPH works with partners in all four publicly-funded school boards to provide school-based dental screening for children in JK, SK and Grade two and to meet provincial performance indicators for Oral Health<sup>a</sup>. During the September

a #1.8 Oral Health Assessment and Surveillance: % of schools screened (2014/15 school year) – Target 100%
 #1.8 % of JK, SK and Grade two students screened in all publicly funded schools (2014/15 school year) – Target 100%

2014 to June 2015 school year, OPH's dental hygienists screened approximately 26,000 children in 216 elementary schools, and 2,440 (nine per cent) children were identified with dental needs. Of these 1,424 (five per cent) were identified with urgent dental needs such as pain, oral infection and open decay. In these cases, parents were notified and children were referred for dental treatment to OPH dental clinics and private dental offices. Additional grades were screened in 29 of these schools because of the high proportion of children identified with obvious dental needs (ranging from 14 per cent – 33 per cent). Children that had no dental insurance and did not have the funds to pay for urgently needed dental services were helped to access treatment by enrolling into a publically funded dental program.

Pre-School children – To identify children aged zero to four with dental disease, OPH offered dental screening in 50 daycares in areas where the school screening identified high levels of dental disease. This approach helps to identify and treat problems at an earlier stage reducing the burden and cost of dental disease.

# **Community Outreach**

Early childhood dental disease can be prevented. Over and above the school and daycare screening, OPH staff also provides early identification through community outreach to screen young children and provide education to parents to improve daily oral health habits for the family.

OPH regularly offers dental screenings at the four City of Ottawa Community and Social Services HUBS and several shelters such as the Carling Avenue and Forward Avenue family shelters. In 2014, 338 dental screening were provided at these locations. Of these 112 (33 per cent) were identified with urgent dental needs such as pain, oral infection and open decay.

In partnership with the Timuralaat Inuit Child Care Centre and the Makonsag Aboriginal Head Start Program, OPH offers dental screenings and preventive services, such as fluoride varnish applications twice a year. At the Wabano Centre for Aboriginal Health, OPH hygienists do monthly dental screenings, share dental health information, apply fluoride varnish, clean dentures, and help clients navigate the dental system to access treatment services and promote dental visits. Other Aboriginal Centres are also visited on a regular basis.

OPH dental staff visit 14 Community Health and Resource Centres each month to offer dental screenings, give dental health information, apply fluoride varnish, clean dentures, help clients navigate the dental system to access treatment services and to promote

8

and enroll new clients to programs. In 2014, OPH delivered dental health services to 700 children and 1,000 adults at Community Health and Resource Centres.

Additionally, through community water fluoridation, OPH reaches 91 per cent of Ottawa residents, to provide universal access to this effective preventative dental health intervention. In 2012, OPH's Board of Health endorsed the report entitled <u>Oral Health – More Than Just Cavities: A report by Ontario's Chief Medical Officer of Health</u>, which recommends that all Ontarians have access to optimally fluoridated drinking water.

OPH dental programs seek opportunities to refer clients to other OPH programs to promote their health. For instance, OPH dental staff speak to clients about smoking cessation and have counseled 660 patients about tobacco since 2012. The program has also distributed over 360 *NutriSTEP* questionnaires to families of children 18 months to five years since 2014, which assesses eating habits and identifies nutrition problems in children, as well as provides information and resources for families to help address these issues.

#### Dental Treatment

In addition to its oral health promotion and prevention programs, OPH oversees several socially-funded dental treatment programs for low-income adults and children, either directly by delivering dental treatment at one of the three OPH-operated dental clinics or indirectly through paying for treatment provided by private dentists (see document 2).

These programs include:

 Adults - Social Assistance Clients: Emergency dental treatment for adults and older adults who are covered by social assistance.

In 2014, OPH assessed and treated 4,700 adults for emergency dental services, such as pain, infection, fillings and extractions, and assessed an additional 1,000 for denture services. In 2014, this program also provided access to emergency dental services and denture services for 2,300 seniors.

Adults - Non Social Assistance Clients: Urgent and preventative treatment for low-income older adults who are not covered by social assistance.

With the City's Older Adult Plan 2014 funding<sup>b</sup>, dental hygienists relieve pain and suffering related to poor oral health for vulnerable older adults. OPH partners with

<sup>&</sup>lt;sup>b</sup> OPH received \$130,000 in Older Adult Dental Funding per year in 2014 and 2015

Community Health and Resource Centres to identify older adults with urgent dental needs. For those who qualify, dental treatment is provided at private dental offices that accept these clients and the Ottawa Hospital dental clinic for clients with complex medical conditions.

In 2014, working closely with Community Health and Resource Centres to identify older adults with dental needs, OPH offered dental screenings to 486 older adults of whom 238 (49 per cent) had urgent dental findings. Of this group, 218 received urgent dental treatment and/or dentures; and 139 received fluoride varnish applications to harden tooth enamel and make it more resistant to decay. The City's Older Adult Plan continues to fund this work in 2015 (\$130,000 one-time renewable upon successful application).

#### 3. Children - Basic level dental treatment

Access to dental treatment in children's programs include checkups, tooth cleaning and other preventive care as well as clinical treatment such as fillings and extractions. OPH works to increase the number of private dentists who accept children covered under socially-funded dental programs, and strives to build strong partnerships with dentists, to streamline information and referral processes. In 2014, OPH reviewed, approved and processed 13,400 dental claims from 400 private dentists who provided services for clients covered under socially-funded dental plans. Additionally, OPH has a service contract to coordinate the dental plan for the Ottawa Children's Aid Society.

OPH refers children that need dental specialist services to the dental clinic at the Children's Hospital of Eastern Ontario (CHEO) and to local pediatric dental specialists. In 2014, OPH referred 369 young children aged two to five years that required dental treatment under general anaesthesia to CHEO. OPH also provides health promotion information to the child's parents and a follow-up appointment after the surgery to ensure that the family is linked with a dental office for ongoing check-ups.

Clients who do not qualify under a socially-funded dental program are advised of other low-cost services, such as dental hygiene clinics at La Cité collégiale, Algonquin College, Canadian Institute of Health, the Ottawa Mission, and the Youth Services Bureau.

#### DISCUSSION

# **Next steps/Future Directions**

# Provincial Integration of children's dental programs into one new Healthy Smiles Ontario (HSO) program

In December 2013, the provincial government announced its intent to integrate oral health programs and/or benefits for children and youth from low-income families into one new program (see document 3). The new integrated Healthy Smiles Ontario (HSO) Program will be launched on January 1, 2016 and will be 100 per cent provincially funded by the Ministry of Health and Long-Term Care (MOHLTC). OPH currently coordinates five out of six programs that will be integrated: HSO; Children in Need of Treatment; Ontario Works; Ontario Disability Support Program (discretionary items) and public health unit preventive services under the Ontario Public Health Standards. OPH is not involved with the <a href="Assistance for Children with Severe Disabilities Program">Assistance for Children with Severe Disabilities Program</a> as these children need specialized care in a hospital setting.

Planning is underway for the changes that will be implemented in 2016 as a result of the provincial integration of the six dental programs for children and youth. Since 2014, OPH has been working with the MOHLTC providing advice on the program design and implementation considerations. It is anticipated that in the new integrated program, key public health roles/activities will be preserved including: health promotion and education; school-based dental screening; case management and follow-up to ensure children identified with urgent problems can access treatment; delivery of preventive and other treatment services; referral support and program evaluation and reporting. Public Health Units will continue to identify children in need of emergency and essential care and assist them to access dental treatment. There will be continued support and funding for existing public health dental clinics. Public Health units will no longer receive and process payments to private dental offices for these programs nor directly enroll children into the new HSO program as these tasks will be the responsibility of a third party administrator.

With respect to the Provincial Integration project, funding currently used to process and pay the dental claims from private dental offices will be realigned to the Ministry's third party administrator to enable them to pay the claims. At this time, no additional information related to how or if the integrated HSO program will impact OPH's Dental Program Budget.

# Wabano Clinic - Improving Aboriginal Oral Health

In Canada, Aboriginal peoples living off reserve tend to have poorer dental health than non-Aboriginals. Approximately 30 per cent of Aboriginal children under six have a dental problem.<sup>10</sup> Dental caries are almost double among those aged six to 11 (84 per cent versus 46 per cent) and higher among those aged 12 to 19 (76 per cent versus 58 per cent). Aboriginal adults are nearly twice as likely to have untreated dental cavities (34 cent) compare to non-Aboriginal adults (19 per cent).<sup>11</sup>

In 2014, OPH received 100 per cent provincial capital funding to build a dental clinic at the Wabano Centre for Aboriginal Health. In September 2015, the Ministry also provided on-going 100 per cent provincial base funding to support operations for this dental clinic. As a result, at the Ottawa City Council Meeting of October 28, 2015, City Council approved the creation of five new full-time equivalent positions for clinic staff who would work at the clinic to provide treatment and prevention services care to Aboriginal children, youth and adults as well as outreach in the broader Aboriginal community.

In partnership with the Wabano Centre, the dental clinic will provide preventive and treatment services in a culturally safe environment. This clinic will serve Aboriginal children and youth covered under the HSO program as a priority and when capacity exists, it will serve others, including children and youth from other publically funded programs and Aboriginal adults.

The project will meet the oral health needs of Ottawa's Aboriginal community in the following ways:

- 1. Ensure that services respect Aboriginal values, language, knowledge and culture;
- 2. Improve equitable and timely access to dental health treatment and prevention services;
- 3. Improve health outcomes, such as being free from infection and oral pain
- 4. Maximize system efficiencies integrating services into an already well established agency; and
- 5. Deliver high quality dental care that is evidence-based, client-centered, timely, and matches the right dental provider to the clients' dental needs, and ensures continuity of care with a permanent dental team at Wabano.

Tender for the design and construction of the clinic is now underway with clinical operations expected to commence in 2016.

## **RURAL IMPLICATIONS**

There are no rural implications associated with this report.

#### CONSULTATION

OPH continues to contribute to provincial committees and provide input on operational implications of the new provincial integration.

# **LEGAL IMPLICATIONS**

There are no legal impediments to receiving the information in this report

## **RISK MANAGEMENT IMPLICATIONS**

There are no risk management implications associated with this report.

## FINANCIAL IMPLICATIONS

There are no financial implications associated with this report.

# **ACCESSIBILITY IMPACTS**

There are no accessibility impacts associated with this report.

## SUPPORTING DOCUMENTATION

Document 1 - Ottawa Public Health Dental Programs and Services

Document 2 - Dental Programs for Low-Income Adults

Document 3 - Summary of Publically Funded Children's Dental Programs that will be integrated

## DISPOSITION

This report is for information. Ottawa Public Health will continue to work with partners to advance dental health programming and services in Ottawa.

### REFERENCES

- World Health Organization: The world oral health report 2003: continuous improvement of oral health in the 21st century: the approach of the WHO Global Oral Health Programme. Geneva, Switzerland: WHO; 2003.Available from: http://www.who.int/oral\_health/media/en/orh\_report03\_en.pdf
- 2. Azarpazhooh A, Leake JL. Systematic review of the association between respiratory diseases and oral health. J Periodontol. 2006 Sep;77(9):1465-82.
- 3. Humphrey LL, Fu R, Buckley DI, Freeman M, Helfand M. Periodontal disease and coronary heart disease incidence: a systematic review and meta-analysis. J Gen Intern Med. 2008 Dec;23(12):2079-86. Epub 2008 Sep 20.
- 4. Taylor GW, Burt BA, Becker MP, Genco RJ, Shlossman M. Glycemic control and alveolar bone loss progression in type 2 diabetes. Ann Periodontol. 1998 Jul; 3(1):30-9.
- 5. Ontario Dental Association. Oral health and aging: addressing issues and providing solutions. Oral health issues for Ontarians: special report. Toronto: ODA; 2010. Available from: http://www.oda.on.ca/senior-special-report.html
- 6. Health Canada. Report on the findings of the oral health component of the Canadian Health Measures Survey 2007–2009. 2010 Technical document. Available from: http://www.fptdwg.ca/index\_htm\_files/CHMS-E-tech.pdf
- 7. Canadian Community Health Survey [2013-2014], Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.
- 8. Ambulatory Emergency ACS dental conditions K02-K06,K08,K098-K099,K12-K13, [2005-2014], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: Aug 17, 2015.
- 9. Savage MF, Lee JY, Kotch JB, Vann WF, Jr. Early preventive dental visits: effects on subsequent utilization and costs. Pediatrics 2004; 114: 418-423.
- 10. Statistics Canada. Health of First Nations children living off reserve and Métis children younger than age 6 Health Reports Vol. 23, no. 1 Statistics Canada Catalogue no. (82-003-X) Available from: http://www.statcan.gc.ca/pub/82-003-x/2012001/article/11624-eng.htm

11. Health Canada. Report on the findings of the oral health component of the Canadian Health Measures Survey 2007–2009. 2010 Technical document. Available from: http://www.fptdwg.ca/index\_htm\_files/CHMS-E-tech.pdf