Briefing Note: Enhancing the Roles of Public Health for Optimal Oral Health

Purpose To advise the Ministry of Health (MOH) on enhancing the roles of Public Health so that every Ontarian can achieve and maintain optimal oral health throughout the life span.

Key Highlights

- The Canadian Dental Care Plan (CDCP) will expand access to oral health services for low-income, uninsured Canadians. However, the CDCP is not universal and will not address all oral health inequities.
- The current Ontario Public Health Standards (OPHS) lack standards for preventive oral health programs across the lifespan, with the major focus being on children and seniors.
- It is recommended that the MOH continues to invest in provincial public health prevention interventions to support a multifaceted, cost-effective life course approach to oral health promotion. This will help improve overall population health and support the success of the federal dental program.
- Overarching recommendations:
    - Continue to invest and sustain current oral health practices that are already underway within each of the roles of Public Health.
    - Enhance investments in upstream, population – based roles for health promotion and disease prevention/delay.
    - Expand downstream efforts to reach other marginalized groups facing barriers to accessing care.

Setting the Context

Oral health issues can cause pain, infection, and lead to chronic diseases, with physical, social, and psychological consequences. With a strong knowledge base in working with vulnerable groups experiencing challenges in accessing and receiving care, the Ontario Association for Public Health Dentistry (OAPHD) is committed to promoting universal access to appropriate oral health care for all Ontarians.

The OAPHD considers the CDCP as a major step forward towards universal oral health care access. However, this treatment focused program will not address all oral health inequities experienced by Ontarians. It is imperative for the provincial government to continue investing in Public Health for disease prevention and align public dental programs to ensure that:

- vulnerable populations do not fall through any gaps in accessing oral health care,
- health equity integration is sustained to meet the community's unique needs and
- upstream interventions that use a life course approach are emphasized, with the intention of preventing oral health issues.

Both the roll out of the CDCP and the OPHS review provide opportunity to acknowledge the current public health practices that are working well while addressing their challenges to better promote oral health in the future. Strengthening the multifaceted roles of public health in oral health will result in:

- the long-term prevention of chronic disease,
- improved health and wellbeing, and
- reduced costs and burden placed on the health care system.

The Roles of Public Health in Oral Health

Public Health's role in oral health care integrates a multipronged, health equity focused approach to help those who are most vulnerable both at the population and individual level. This is to help maintain overall health and wellbeing and prevent oral health issues and future chronic diseases. There are seven Public Health roles that, when implemented together, lead to improved health outcomes[1]:

Public Health Roles

1. **Health Promotion:** support disease prevention and healthy behaviours by building healthy public policies, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services.[1]
2. **Primary Prevention**: prevent diseases from developing or significantly delay disease onset (e.g., community water fluoridation [CWF], fluoride varnish [FV], and dental sealants).
3. **Secondary Prevention**: detect diseases, including before noticeable symptoms appear, and aims to decrease the prevalence of disease by shortening its duration (e.g., dental screening and silver diamine fluoride [SDF]).
4. **Tertiary Prevention:** stops disease progression and further adverse health outcomes in marginalized populations (e.g., fillings and extractions).
5. **Navigation Support**: increase awareness of, access to, and utilization of public dental programs.
6. **Data Collection and Surveillance**: collect and analyze population level data, monitor trends, and identify emerging priorities and health inequities that can inform broader health system goals.
7. **Dental Infrastructure Oversight**: support a public model that integrates fixed clinics, dental buses, and portable services in community settings to serve those most at risk.

[1] Health Promotion Ontario. (2023). White Paper on the Value of Local Health Promotion in Ontario. https://www.healthpromotioncanada.ca/wp-content/uploads/2023/10/2HPO-Value-of-Local-Health-Promotion-White-Paper.pdf

The OPHS alludes to all seven roles. However, some areas receive more emphasis than others, and not all roles are considered requirements, leading to minimal implementation. In addition, the CDCP will assist with some of these roles (e.g., primary, and secondary prevention); however, if not aligned well with provincial programs, the CDCP will result in Public Health redirecting significant resources into other roles (e.g., navigation support).

For a substantial shift towards better health outcomes, the OAPHD deems that it is essential for PHUs to offer a **suite of programs and services in all role areas** across the life course and amongst those most at risk. Implementing the bare minimum in each role or offering mainly downstream interventions in each role is not enough to achieve and maintain optimal oral health throughout the life span. Downstream interventions address early detection and treatment of diseases, which are only partially effective at reducing the need for more expensive health care. However, it is the upstream approaches that reduce the burden of disease on the health care system even further since they address the root causes of disease (see Footnote 1).

Proposed Recommendations

The OAPHD reviewed current practices and gaps within Public Health and identified opportunities for enhancement in the future provision of public dental programs, knowing that there will be the added federal program. It is critical to point out that at a minimum, current practices must continue into the future state:

Overarching Recommendations

- Continue to invest and sustain current oral health practices that are already underway within each of the roles of Public Health.
- Enhance investments in upstream, population – based roles for health promotion and disease prevention/delay.
- Expand downstream efforts to reach other marginalized groups facing barriers to accessing care.

This will:

1. supplement the treatment based CDCP.
2. improve equity by increasing Public Health's capacity to expand targeted efforts to more vulnerable populations.
3. enable individuals of all ages to benefit from improved overall health, resulting in more cost savings to the health care system compared to a focus on treatment.

Table 1 proposes more specific recommendations for further enhancing the roles to better meet the needs of vulnerable populations using a life course approach. Some examples of PHUs implementing the enhancements are also included in the table; these show the need and feasibility of the proposed recommendations.

Table 1

Proposed Recommendations for the Roles of Public Health in Oral Health (see Appendix for supporting evidence)

Role of Public Health	Current Practice in PHUs	Challenges/Gaps	Recommendations	Examples of Recommendations[2]
Health Promotion	• Integrate oral health into other Public Health program areas and/or with community stakeholders. • Provide education on oral health behaviours to support positive changes in beliefs and attitudes.	• Some PHUs focus solely on oral health promotion education, resulting in a lack of prioritization, capacity, and qualified skills put towards other health promotion strategies. This also leads to a lack of impact in terms of sustained behaviour change. • The CDCP poses a risk of downstream bias due to an increased focus on treatment versus upstream health promotion. • Provincial campaigns do not always resonate with the local context, requiring additional PHU supports.	• Provide provincial direction that a comprehensive oral health promotion approach with upstream strategies is needed for good oral health outcomes. • Comprehensive oral health promotion programs have proven to be cost-effective. For example, a systematic review indicated that 97% of oral health promotion programs in children were cost saving, with reductions in dental treatment expenses for parents and institutions (see Footnote 1). • Provide provincial direction for targeted approaches to address the underlying determinants of health that lead to health inequities. • Provide standard messaging for integrating into targeted health promotion initiatives. • Encourage pre-existing health services and health sectors (i.e.: nutrition, mental health, tobacco/vaping control etc.) to incorporate cross cutting oral health promotion initiatives.	• Oral Health education at Well Baby Visits [Hastings Prince Edward Public Health (HPEPH)], and for prenatal mothers/new mothers, and adults enrolled in social service programs (Durham). • Train the trainer model to LTC staff (Durham) and PSWs (Hamilton). • Oral health education campaigns and social media messaging (Peel).

[2] This list of examples is not exhaustive.

Role of Public Health	Current Practice in PHUs	Challenges/Gaps	Recommendations	Examples of Recommendations[2]
Primary Prevention	• Provide FV and dental sealants to high needs children. • Monitor and provide support for local CWF.	• Primary prevention programs are lacking across the lifespan as it is not mandated in the OPHS. • Jurisdictional inconsistencies exist with CWF, yet evidence indicates that it is the most effective measure for reducing tooth decay. • The absence of primary prevention increases likelihood of poorer health outcomes (e.g., chronic disease) and higher health care costs (e.g., hospital visits).	• Expand primary prevention programs to include pre-school children, adults, and other vulnerable groups. • Support PHUs to provide sufficient and innovative primary prevention services in a variety of settings (e.g., clinics and community/non-traditional settings such as shelters, long term care). • Provide provincial direction that all communities need to fluoridate water.	• FV provided at daycares, playgroups and during home visits for identified priority populations (HPEPH). • Sealants and FV provided in schools with high dental need via portable and mobile clinics (Peel). • Evidence for CWF is actively monitored for its quality and relevance (Peel).
Secondary Prevention	• Provide oral screening as per OPHS Protocol requirements by intensity level and grade. • Provide case management and follow-up to ensure treatment initiation. • Provide treatment to high-risk Healthy Smiles Ontario (HSO) children.	• Secondary prevention programs are lacking across the life span as they are not mandated in the OPHS. • Children at low and medium screening intensity schools may fall through the gaps without the implementation of screening in higher grades.	• Expand screening, case management and follow-up to pre-school children, additional school grades, and hard to reach groups including residents of congregate settings (e.g., LTC and shelters).	• Free screening and preventive services for 0- to 4-year-olds in the Baby Oral Health Program (Windsor Essex County). • Free screening provided in all LTC homes (Durham). • SDF provided in select high-risk daycares (Durham). • Free screening provided in high schools (Toronto).
Tertiary Prevention	• Provide routine dental care such as fillings and extractions to eligible children and seniors.	• Clients from vulnerable groups such as seniors, recent immigrants and low-income individuals often do not feel comfortable visiting private dental clinics.	• Maintain tertiary prevention investments to ensure that no one falls through the gaps.	• Expand current clinic options based on local needs (Peel).

Role of Public Health	Current Practice in PHUs	Challenges/Gaps	Recommendations	Examples of Recommendations[2]
Navigation Support	• Increase HSO and Ontario Seniors Dental Care Program (OSDCP) client's awareness of oral health services. • Assist with the application process, finding a dental provider, and establishing a dental home.	• If publicly funded dental programs are not aligned, the CDCP will exacerbate pre-existing inconsistencies (e.g., eligibility criteria, application processes, delivery models), reducing capacity for other roles. • Need to be mindful that providing navigation support to complex and marginalized clients is labour intensive in terms of addressing multiple barriers (e.g., transportation, language). • Marginalized communities are not always willing to receive care from those perceived to not represent 'their community'.	• Optimize efficiencies by streamlining and aligning the application and eligibility process for all publicly funded programs. • Invest in community health workers that act as a bridge between the community and Public Health, for clinical care, patient advocacy, cultural supports, and language interpretation. • Allocate funds for community services such as transportation grants for clients that may be hindered by such matters from accessing prevention services. • Provide standard messaging to PHUs that can be tailored to the local context.	• Provision of travel grants to OSDCP clients to access dental services (Public Health Sudbury and Districts). • Utilization of translation services (Remote Interpretation Ontario) to attain informed consent and improve access to care (Windsor Essex County). • Newcomer HSO/Oral Health Navigation Initiative (Hamilton).
Data Collection and Surveillance	• Collect oral screening data for children screened in schools. • Collect HSO and OSDCP program utilization and eligibility data.	• Oral health data collection and surveillance is limited to HSO-enrolled children and OSDCP-enrolled seniors, as per the OPHS. • Challenges exist with extracting and utilizing data from OHISS at the local level. • Existing provincial surveys often do not collect oral health data (e.g., OSDUHS[3], RRFSS[4]).	• Gather and share high quality oral health status data (accurate, complete, reliable, relevant, and timely) on meaningful indictors and that can be disaggregated for the local level with equity considerations.	• Centers for Disease Control and Prevention (CDC) collects oral health data from national and state sources and presents data in useful formats for the broad community interested in promoting oral health.[5]

[3] Ontario Student Drug Use and Health Survey
[4] Rapid Risk Factor Surveillance System
[5] Centers for Disease Control and Prevention. (2022, October 17). Oral Health Data Tools. https://www.cdc.gov/oralhealth/data-tools/index.htm

Role of Public Health	Current Practice in PHUs	Challenges/Gaps	Recommendations	Examples of Recommendations[2]
Dental Infrastructure Oversight	• Oversee provincial funding for constructing and operating public dental clinics.	• Existing infrastructure is not adequate to meet demands for oral health services, which will worsen with increased eligibility from CDCP. • Sufficient resources are lacking to support infrastructure required for harder to reach clients and complex patients.	• Further invest in PHUs to enable a variety of service options within the public model (e.g., mobile dental bus, portable services). • Encourage PHUs to integrate comprehensive wraparound care in health service delivery.	• Dental bus (Peel and Hamilton). • Portable preventive services and restorative treatments offered in LTC homes (Durham). • Portable preventive services in schools and in the community for clients on HSO, OSDCP (Peel and Hamilton), and low- income adults (Hamilton).

Conclusion

Providing oral health care through Public Health Units is an OPHS requirement. However, more can be done for overall health and chronic disease prevention. Provincial investments in enhancing the roles of public health in oral health are needed to sustain and expand public dental programs across the lifespan and ensure that vulnerable populations do not fall through the gaps. Balancing treatment needs with ongoing provincial investments in prevention interventions will support a multifaceted approach to oral health that is rooted in health equity, is cost effective in improving overall population health by reducing chronic disease, and ultimately supports the success of the CDCP. The OAPHD has proposed several recommendations to support this and is available to collaborate further with the Ministry of Health and other provincial oral health stakeholders to outline the roles of public health in the future state of oral health.

Appendix

Appendix A - Supporting Evidence

Health Promotion Ontario. (2023). White Paper on the Value of Local Health Promotion in Ontario. https://www.healthpromotioncanada.ca/wp-content/uploads/2023/10/2HPO-Value-of-Local-Health-Promotion-White-Paper.pdf

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Centers for Disease Control and Prevention. (2022, October 17). Oral Health Data Tools. https://www.cdc.gov/oralhealth/data-tools/index.htm

Appendix B - Examples of Recommended Enhancements to Public Health Roles

(Please note that this list of examples is not exhaustive)

- **Health Promotion**
    - Build health promoting schools through school health curriculum support resources for educators to facilitate the delivery of oral health education.
        - Grade 1 (Public Health Sudbury and Districts)
        - Grade specific education provided to high-risk elementary schools and high schools upon request (Durham)
    - Incorporate oral health promotion into pre-existing health services such as Well Baby Visits (HPEPH), programs for prenatal mothers/new mothers, and adults enrolled in social service programs (Durham).
    - Involve non-dental professionals in oral health promotion through a train the trainer model to LTC staff (Durham) and Personal Support Workers (PSW) (Hamilton).
- **Primary Prevention**
    - Fluoride Varnish (FV) provided at daycares, playgroups and during home visits for identified priority populations (Hastings Prince Edward Public Health [HPEPH]).
    - Sealants and FV provided in schools with high dental need via portable and mobile clinics (Peel).
    - Evidence for Community Water Fluoridation (CWF) is actively monitored for its quality and relevance (Peel).
- **Secondary Prevention**
    - Free screening and preventive services for 0- to 4-year-olds in the Baby Oral Health Program (Windsor Essex County).
    - Free screening and silver diamine fluoride (SDF) preventive services provided in select high risk daycare centres (Durham).
    - Free screening provided in all long-term care (LTC) homes (Durham).
    - Drop-in dental screening clinics on school PA days for children aged 0-17 (Public Health Sudbury and Districts).
    - Free screening in high schools (Toronto).
    - Newcomers Centre of Peel project provided screening and preventive services for Ukrainian refugee families (Peel).
- **Navigation Support**
    - Provision of travel grants to OSDCP clients to access dental services (Public Health Sudbury and Districts).

- Utilization of translation services (Remote Interpretation Ontario) to attain informed consent and improve access to care (Windsor Essex County).
- Newcomer HSO/Oral Health Navigation Initiative (Hamilton).

- **Data Collection and Surveillance**
  - Centers for Disease Control and Prevention (CDC) collects oral health data from national and state sources and presents data in useful formats for the broad community interested in promoting oral health.

- **Dental Infrastructure Oversight**
  - Dental bus (Peel and Hamilton).
  - Provide preventive and treatment services via mobile vans for LTC clients (Toronto).
  - Portable preventive services and restorative treatments offered in LTC homes (Durham).
  - Portable preventive services in schools and LTC homes (future), brick-and-mortar dental clinics for clients on HSO, OSDCP, and adults experiencing low-income (Hamilton).

Appendix C – The Group

Name	Title	Organization
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