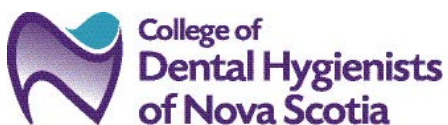


Dental Hygienists Prevent More to Treat Less



Promoting health and preventing disease
by integrating dental hygienists, at their full scope of practice,
into Nova Scotia's primary health care system



A White Paper

commissioned by the
College of Dental Hygienists of Nova Scotia

October 2014

Acknowledgements

The College of Dental Hygienists of Nova Scotia (CDHNS) is grateful to the many stakeholders who shared their expertise, opinions and time with us as we developed this White Paper. Stakeholders included members of the College of Dental Hygienists of Nova Scotia (CDHNS), Members of Council (CDHNS), the Primary Health Care Branch of the Nova Scotia Department of Health and Wellness, and the Dalhousie School of Dental Hygiene. In addition to stakeholders, we thank several knowledgeable members of the oral health community who generously agreed to preview the White Paper. Their contributions have greatly enhanced the final product.

About the College of Dental Hygienists of Nova Scotia

Under legislation enacted in 2009, the CDHNS is responsible to serve and protect the public by regulating the profession of dental hygiene. This includes overseeing and managing registration, licensing and disciplinary processes, and establishing, maintaining and developing standards of practice, ethical standards, and standards for the education and competence of its members.

The CDHNS represents 700 registered and licensed dental hygienists in Nova Scotia. The CDHNS has representation on the National Dental Hygiene Certification Board, the Commission on Dental Accreditation of Canada, the Canadian Federation of Dental Hygiene Regulatory Authorities, the Canadian Dental Hygienists Association, and the Nova Scotia Regulated Health Professions Network. The CDHNS is committed to the provision of high quality dental hygiene care as an integral part of obtaining optimal overall health for Nova Scotians across their life span. To learn more about the CDHNS and to review our annual report, visit our website at www.cdhns.ca

About the Author

Dianne Chalmers (BSc Dip DH) is a Dalhousie graduate who began her career as a dental hygienist at the Izaak Walton Killam Hospital in 1978. In this role, she worked within an interprofessional environment, to serve the oral health needs of medically compromised infants and children. Much of her time at the IWK was spent in the operating room, assisting in the surgical treatment of children with early childhood caries. In the years that followed, Dianne worked in a variety of dental specialty practices in Montreal and Halifax. She taught as a part-time lecturer for 12 years at the Dalhousie School of Dental Hygiene, while also coordinating student externships to a seniors' retirement centre. During that time, she developed an individualized oral health program for residents based on dental hygiene assessments. After leaving Dalhousie, Dianne spent 15 years at Capital Health Public Health Services, where she was involved with population health program planning, screening, referral and service delivery. Her job required skills in navigation, case management and advocacy to facilitate access to oral health care for vulnerable populations. Dianne is now a community oral health consultant to the College of Dental Hygienists of Nova Scotia.

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A Message from the Council Chair

To the reader:

In its five years as a self-regulated profession, the College of Dental Hygienists of Nova Scotia (CDHNS) has worked hard to ensure excellence in dental hygiene care for all Nova Scotians. The CDHNS is committed to the provision of high-quality dental hygiene care as an integral part of attaining optimal overall health for all Nova Scotians across their life span. To this end the CDHNS continues to work on increasing access to oral health care in settings that meet the needs of the population.

This White Paper was commissioned by CDHNS to outline the significant contribution that dental hygienists make to the prevention of oral diseases and to the promotion of oral health every single day. It also identifies the need to develop a comprehensive oral health strategy for Nova Scotia that optimizes the scope of practice of dental hygienists, and to involve dental hygienists in the making and delivery of this strategy to the public.

Some of the recommendations in this report are far-reaching and have financial implications. The CDHNS recognizes that there are many competing needs for the limited resources in the province. It is critical that we spend our limited resources in a thoughtful manner to achieve a long-lasting return on our investment. It is time to shift the focus from treatment to prevention and use our resources—both human and financial—more effectively. Certain small changes can have a big impact in the lives of those most in need.

We know that dental hygienists in Nova Scotia are an under-utilized health resource capable of “preventing more to treat less.” The CDHNS is open to discussing how the role of the dental hygienist can be expanded, with those decision-makers who hold the health of Nova Scotians in their hands. We look forward to every opportunity to ensure excellence in dental hygiene care, to the benefit of the overall health of Nova Scotians.

Sincerely,



Joyce Lind,
Council Chair 2014-2015
College of Dental Hygienists of Nova Scotia

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Purpose and Aims

Purpose of this White Paper

The purpose of *Dental Hygienists Prevent More to Treat Less* is to stimulate discussion about important health policy changes that are needed to improve the health of Nova Scotians.

The College of Dental Hygienists of Nova Scotia (CDHNS) commissioned this White Paper to serve as a position paper and valuable reference document for the Minister of Health and Wellness, the Chief Medical Officer of Health, Deputy Minister of Health, administrators and policymakers in the Nova Scotia Department of Health and Wellness, Primary Health Care and Public Health Branches, as well as other health professionals and stakeholders involved with health policy, planning and service delivery for the province of Nova Scotia.

Aims of this White Paper

- ▶ To briefly discuss the issues surrounding widening oral health inequalities and barriers to care, along with the human impacts and financial consequences associated with oral diseases.
- ▶ To present the need for a long-overdue shift of focus and resources from treating oral diseases to promoting oral health and preventing oral diseases.
- ▶ To advocate for the integration of preventive oral health services into Nova Scotia's universally accessible primary health care system.
- ▶ To increase decision makers' and allied health professionals' awareness of the full scope of practice and potential contributions of the dental hygiene profession.
- ▶ To promote dental hygienists as key members of interdisciplinary primary health care teams who are prepared to provide preventive oral health care services in community-based non-dental settings.

Executive Summary:

Why we need to prevent more to treat less

The fundamental premise of this White Paper is that dental hygienists possess the knowledge and competencies to play a vital role in promoting oral health and preventing oral disease in Nova Scotia—especially if their services are integrated into the province’s universally accessible primary health care system. Given the critical importance of oral health to overall health, and the increasingly high costs of treating disease in an aging society, it is more equitable and cost effective to provide preventive oral health care within the primary system.

Inequalities persist

Despite dramatic overall improvements in oral health in recent decades, significant inequalities in oral health persist across Canada. The most vulnerable populations carry the greatest burden of disease and face the most difficulty accessing oral health care services. There is clear evidence that oral health is a critical component of general health, but oral health care services are not part of the publicly funded universal health care system in Canada.

The need for prevention is high

Even though oral diseases are preventable, treatment of these diseases continues to be the focus of most dental practices in Canada. Recent Canadian reports call for a renewed emphasis on oral disease prevention, while research is shedding light on barriers to accessing oral care services and exploring ways to reduce health inequalities through workforce innovations that increase access to preventive oral health care services. Many of these innovations optimize dental hygienists’ full scope of disease-prevention and health-promotion practice, and recognize the need for dental hygienists to provide these services outside the traditional dental-office environment, in non-dental community-based settings. This model would deliver preventive oral health care services more effectively, while improving accessibility for people who are unable to obtain oral health care services in typical dental-office settings.

Systemic change is required

The Nova Scotia government took an important step toward improving access to oral health care services on May 15, 2009, when it proclaimed the *Dental Hygienists Act of Nova Scotia*. This new legislation removed the requirement that dental hygienists work within the context of a dental practice, paving the way for people to access dental hygienists as primary health care providers in alternative settings—but the new legislation did not go far enough, as it did not provide for financial coverage of dental hygienists’ services under existing publicly funded dental plans. This created another barrier to oral care services for vulnerable populations in need of them.

Dental hygienists are ready to help

The affinity of dental hygiene in scope and aim to primary health care principles is clear. The College of Dental Hygienists of Nova Scotia believes the time is right for dental hygienists to be recognized within Nova Scotia’s primary health care system. Dental hygienists are skilled professionals prepared to take oral health services to individuals and communities in a variety of universally accessible settings in order to reduce oral health inequalities.

Meet the dental hygienist: Skilled professional, comprehensive practitioner

Dental hygienists are highly educated professionals who complete rigorous training and meet strict standards of competency and practice. Their comprehensive clinical, critical thinking and problem-solving skills—along with their understanding of social justice and the determinants of health—qualify them to make high-level contributions to the health care of Canadians, when utilized to their full scope of practice.¹

The profession of dental hygiene defined

In 2010, Canadian stakeholders in the dental hygiene profession, led by the Canadian Dental Hygienists Association, solidified national standards of practice and competencies for entry into the profession. In the process, they defined dental hygienists as follows:

“Dental hygienists are primary oral health care providers guided by the principles of social justice who specialize in services related to clinical therapy, oral health education and health promotion. Dental hygienists provide culturally sensitive oral health services for diverse clients throughout their life cycle. They work collaboratively with clients, guardians and other professionals to enhance the quality of life of their clients and the public.”

A comprehensive scope of practice

The profession of dental hygiene incorporates a comprehensive scope of practice. Dental hygienists are communicators, collaborators, critical thinkers, advocates and coordinators. The framework guiding the dental hygiene process of care (ADPIE—Assess, Diagnose, Plan, Implement, Evaluate) aims to attain and maintain oral health by assessing oral health status and identifying risk for disease, formulating a dental hygiene diagnosis, planning and implementing preventive and therapeutic interventions, and evaluating the effectiveness of the care provided. This framework not only applies to individuals but also to communities. Dental hygienists do much more than “clean teeth.” They provide:

Preventive and therapeutic care

- vital signs assessment
- oral cancer screening
- dental caries (cavities) screening
- periodontal disease screening
- preventive therapies, such as fluoride gel, varnish and sealant application
- clinical interventions, such as scaling, root planing and polishing

Oral health education

- oral hygiene practices and techniques
- oral disease prevention
- dietary and tobacco cessation counselling
- dental caries (cavities) risk assessment in young children
- anticipatory guidance with parents and caregivers

Oral health promotion

- advocate for policies and programs that promote oral health (community water fluoridation, “First Visit by First Birthday” protocol, publicly funded dental coverage for seniors)
- coordinate and deliver programs that promote oral health and prevent disease (fluoride mouthrinse programs in at-risk schools; fluoride varnish and dental sealants)
- provide oral health surveillance, assessments and screenings in community health settings

Framing the problem: Oral health issues in Canada and Nova Scotia

As the incidence of oral diseases continues to rise in some segments of the population, systemic barriers make it difficult-to-impossible for these at-risk populations to access the preventive oral health care required to avoid costly dental treatments which they cannot afford. As a result, the oral—and overall—health of society’s most vulnerable people declines, widening the oral health disparity gap, while the need for complex treatments with higher costs and risks rises.

Oral health inequalities and barriers to care

According to the *Canada Health Act*, universal, accessible and publicly funded health care is a fundamental right of all Canadians yet, with few exceptions, oral health services are not included. This leaves most Canadian families responsible for financing their own dental care.^{2,3,4} Oral health is a vital component of overall health but uninsured, underinsured and underserved (vulnerable) populations who have the most difficulty accessing the oral health care system are the same populations that experience the greatest burden of disease and are most in need of oral health care services.^{4,5,6}

In recent decades there has been an overall dramatic improvement in oral health in Canada,⁷ but it is not shared equally across populations. Significant inequalities in oral health and access to oral health care services persist, with serious negative effects on vulnerable populations. These vulnerable populations include people living in poverty, the working poor, the uninsured, refugees, some immigrant groups, people with disabilities, some seniors, and people living in rural and isolated areas. These people, who make up an estimated 17 per cent of the Canadian population, are disproportionately affected by oral disease.⁷ Twice as many lower-income Canadians have cavities that need a filling, compared to higher-income Canadians. Nearly half of lower-income Canadians experience gingivitis (inflammation of the gums), compared to one-quarter of higher-income Canadians. Half of Canadians in the lower income bracket do not have dental insurance.² Even though they carry the heaviest burden of oral disease, the most vulnerable people have the weakest voices when it comes to advocating for change.⁷

The working poor are especially vulnerable—while their jobs seldom offer employment-related health insurance, their employed status often makes them ineligible for dental care under publicly funded programs. Working people with limited incomes can barely cover the cost of food, clothing and housing. Dental bills may even threaten food security in this group.⁸

Barriers to accessing oral health care and reducing oral health inequalities are varied and complex—it is not just a lack of adequate financial means. In addition to income, determinants affecting access include education, health literacy, geography, availability of transportation, cultural preferences and norms, language, and age. Past unpleasant experiences with dental services and beliefs about the relative necessity of dental care may also affect willingness or ability to seek care.

“Oral health remains a hole in our celebrated Canadian health care model and gets marginal interest at the national level and inconsistent interest at the provincial levels of health policy discourse.”

Dr. Garry Aslanyan DMD, MPH
FRCD(C), policy manager with
the World Health Organization
in Geneva, Switzerland

Because barriers to access are so complex, providing a universal program does not necessarily address disparities in oral health status. A Nova Scotia study found that providing universal access to a children’s oral health program did not reduce disparities between the dental-caries experiences of children from families with low educational levels and those of children from families with high educational levels. The author, Dr. Amid Ismail, concluded that reducing disparities would require a multi-factorial approach and focused efforts by “professional and governmental organizations to understand the socioeconomic, behavioral and community determinants of oral health disparities.”⁹

“Chronic disease is defined as disease that is long-lasting or recurring; systemic disease refers to disease that affects the whole body. With these definitions in mind, we can classify the two major oral health conditions—periodontal (gum) disease and dental caries (tooth decay)—as both chronic and systemic diseases.”

Dr. Peter Cooney BDS, DDPH, MSc, FAGD, FRCD(C), Chief Dental Officer, Health Canada

Recently, researchers in the United States have devoted considerable effort to understanding the barriers and identifying workforce innovations and service-delivery models that reduce health inequalities by increasing access to preventive oral health care. Many of these innovations involve utilizing dental hygienists to the full health promotion and disease prevention scope of their practice, in non-dental primary health care settings.¹⁰ These are useful models for Nova Scotia to examine and emulate in order to address barriers to care and health disparities in the province.

Impacts and costs of oral diseases

The two most prevalent oral diseases are dental caries (cavities) and periodontal disease. These are chronic diseases affecting children, adolescents, adults and the elderly.¹¹ Worse, a growing body of research demonstrates that oral diseases contribute to the severity of certain systemic diseases, including diabetes, cardiovascular disease and bacterial pneumonia.¹²

Periodontal disease

Periodontal disease is the description applied to the inflammatory response of the gums and surrounding supportive tooth structures to the presence of bacterial plaque on the teeth. There are numerous subtypes of periodontal disease, but gingivitis and periodontitis are the most common.

Gingivitis, an extremely common inflammation of the gums, is an entirely reversible condition. Ten days of thorough cleansing at and under the gum line, where bacterial plaque accumulates, addresses the root causes of inflammation, allowing the gum tissue to heal.

Periodontitis is an inflammation of the gums and supporting tissues of the tooth characterized by progressive destruction of the bone. Many factors underlie the disease, which develops through inflammatory processes triggered by bacterial plaque buildup.¹³ Periodontitis is associated with cardiovascular disease, diabetes and hospital-acquired and nursing-home pneumonia in the elderly.¹⁴ In fact, there is a bidirectional relationship between diabetes and uncontrolled periodontitis—diabetes is linked to worsening periodontitis and periodontitis makes it harder for diabetics to control their blood sugar.¹⁵

While a cause-and-effect relationship has not yet been proven, the evidence linking periodontitis to the progression of systemic diseases is associated with both bacteraemia (the presence of bacteria in the bloodstream) and elevated levels of various markers of systemic inflammation.¹³ The treatment of periodontitis is extensive and cost-prohibitive to many low- and middle-income earners without insurance. Symptoms may not be apparent until an advanced stage, underlining the importance of regular examinations and preventive therapies.

Dental caries

Also known as “cavities” or “tooth decay,” dental caries is the most prevalent chronic disease among Canadians.² Dental caries is caused by many interacting factors. A number of different bacteria are involved in the decay process. High levels of decay-causing bacteria tend to run in families, putting some children at higher risk by virtue of biology. Environmental factors, such as early and/or excessive exposure to high-sugar foods and inadequate oral hygiene, also contribute to the development of caries.

Individuals who develop dental caries in childhood tend to have ongoing issues with their oral health across their lifespan. The consequences of untreated tooth decay for adults are extensive, ranging from pain, infection/abscess, tooth loss, and malnutrition, to low self-esteem and social and psychological difficulties. It is estimated that over 40 million work hours are lost each year due to dental problems and treatment in Canada, with subsequent productivity losses topping \$1 billion. These economic losses are comparable to those caused by other illnesses, such as musculoskeletal sprains.¹⁶

Early childhood caries—a crisis in Canadian oral health

Early childhood caries (ECC) is a particularly virulent form of tooth decay found in children from shortly after tooth eruption to the age of six. It has a profound effect on children’s wellbeing. Pain and abscesses can limit a child’s ability to eat and speak, disrupt sleep, distract a child from learning and playing, and negatively affect self-esteem. These consequences can have a long-term negative impact on a child’s physical growth and quality of life. Furthermore, dental infections associated with ECC are a risk for medical complications, especially for children in families who are least able to afford or access professional care. In rare cases, untreated dental caries has led to life-threatening infection and death.¹⁷

In 2013, the Canadian Institute for Health Information (CIHI) released *Treatment of Preventable Dental Cavities in Preschoolers: A Focus on Day Surgery Under General Anesthesia*. The report points to mounting concerns that young children are not benefitting from known prevention strategies. Instead, they are developing serious dental conditions that require surgery in hospital under general anesthesia.¹⁸

CANADIAN HEALTH MEASURES SURVEY 2007-2009

Dental cavities in children ages 2 to 4 are increasing

57% of Canadian children ages 6 to 11 have had or have a cavity

59% of Canadian children ages 12 to 19 have had or have a cavity

96% of adults have a history of dental cavities

62% of Canadians have private dental insurance

53% of adults between ages 60 and 79 do not have any dental insurance

50% of respondents from the lower income bracket have no dental insurance

78% of respondents from the higher income bracket have dental insurance

The CIHI report states, “The health burden for children and their families and the considerable financial costs to the system associated with ECC-related day surgery should theoretically be entirely avoidable. Good oral hygiene and early access to preventive dental services are among the interventions that can effectively prevent this common condition. Remaining cavity free in early childhood is achievable.”

Findings of the 2013 CIHI report:

- ▶ The leading cause of day surgery for children aged one to five in Canada is treatment of early childhood caries (ECC)
- ▶ Each year, 19,000 day surgeries are performed to treat caries among children younger than six in Canada
- ▶ These operations collectively cost over \$21 million a year, not including payments to dentists or anesthesiologists or the costs of travel for families
- ▶ The average cost of day surgery for ECC in Nova Scotia was \$1,657 (this includes only hospital-associated costs)

Treatment of Preventable Dental Cavities in Preschoolers: A Focus on Day Surgery Under General Anesthesia
Canadian Institute for Health Information, 2013

In Nova Scotia, there are approximately 600 pediatric day surgeries a year for treatment of dental caries. In July 2013, the N.S. Department of Health and Wellness issued a press release announcing that “the province and IWK will increase the number of pediatric dental surgeries for children 16 and younger by adding staff and equipment to the pediatric dentistry department.”¹⁹ This expansion will double the number of Nova Scotia children who receive dental surgery each year, giving “600 more children the surgery they need to live a healthy life and help shorten wait times and reduce visits to emergency rooms.”

While it is admirable that children who need surgical treatment for dental caries will no longer have to wait up to two years or even longer for surgery, this press release overlooks some disturbing facts. First, the deployment of resources to double the number of pediatric dental surgeries to 1,200 per year is a clear indication that severe tooth decay in children is a growing problem in Nova Scotia. Secondly, there is no mention of the fact that surgery does not actually ensure an end to the problem. Children with this disease who do not receive proper follow-up care remain at high risk and usually continue to experience tooth decay after treatment. Finally, there is no mention that early childhood caries is preventable, or any indication that resources will be deployed upstream towards preventing the need for such costly and invasive treatment. Meanwhile, additional announcements around the same time concerning raising the age of dental coverage for children likewise indicated a focus on treatment rather than prevention.

Ironically, these N.S. Department of Health and Wellness press releases appeared shortly after a January 2013 call to action by the Canadian Paediatric Society (CPS) for all Canadian children to have access to quality dental services, regardless of where they live or their family’s socioeconomic status. As the call to action noted, “Publicly funded provincial/territorial dental plans for Canadian children are limited and show significant variability in their coverage. The programs also tend to focus on treatment instead of preventative care.”²⁰ It is evident that Nova Scotia has remained static in this outdated paradigm, which requires significant changes to answer the CPS call to action, in the interests of improving the oral health of families and the province as a whole. Prevention is less costly than treatment—not only for the health care system, but also for families who must take time off work, arrange for childcare, and incur various expenses when taking their children for dental treatment.

Dental caries a strain on emergency services

Every day in Canada, people in pain from tooth decay are burdening the emergency rooms of hospitals because they are unable to pay for dental treatment in a dental-office setting. They receive antibiotics and/or pain medication to alleviate the immediate discomfort, but this approach is a mere band-aid and fails to address the root cause of the tooth pain. Not only do these emergency room visits fail to solve the problem for the person in pain, they place additional and unnecessary strain on already-overstretched emergency health services.

Oral cancer

Once considered an older person's disease, oral cancer rates are increasing among younger people. Human papillomavirus (HPV) infection, smoking, alcohol and betel quid use are all risk factors for mouth, head and neck cancers. In 2013, 30 of 4,150 new cases of oral cancer diagnosed in Canada were in Nova Scotia.²² Almost two-thirds of oral cancer patients are diagnosed in the late stages of the disease, when tumours are large and have spread to lymph nodes,²³ dramatically diminishing the treatability of the disease. Early diagnosis through regular preventive screening greatly improves the chances of successful treatment.

Seniors oral health

In our rapidly aging society, oral health care for seniors is becoming increasingly important. Not only are the overall numbers of seniors increasing, but the proportion of people over 60 who still have their teeth is much greater than in the past, when individuals tended to lose their natural teeth and replace them with dentures. *The Canadian Health Measures Survey* reports that 22 per cent of adults from 60 to 79 years of age are edentulous (without natural teeth), compared to only 4 per cent of 40 to 59-year-olds.^{2,3} While dentures pose their own challenges, seniors with natural teeth face difficulties maintaining their oral health over time—due to declining cognitive and physical function, as well as the inability to pay for regular, preventive oral health care for uninsured seniors on fixed incomes. Furthermore, dental treatment requirements can be more complex for seniors and—given limited availability of preventive or therapeutic oral health care in their places of residence—may require costly transportation to dental offices or the oral surgery departments of hospitals. Alternatively, preventive oral health care services could be provided to seniors in their residences more cost effectively, while eliminating the distress of finding transportation and undergoing more invasive dental treatment.

The high cost of emergency oral care

In 2012, there were almost 58,000 visits to hospital emergency rooms across Ontario for oral pain. At a minimum cost of \$513 per visit, the total estimated cost for dental visits to emergency rooms in Ontario was at least \$30 million in 2012.²¹

Closer to home, the QEII Emergency Department's EDIS Dental Discharge Diagnosis Summary shows that 456 patients were seen in the emergency department for dental-related problems in 2009. That is just one hospital's report from the province of Nova Scotia. It is evidence that many individuals are turning to costly acute care emergency rooms for their dental problems, because they cannot afford dental treatment.²¹

Information on Hospital Emergency Room Visits for Dental Problems in Ontario. 2012 Association of Ontario Health Centres, Ministry of Health & Long Term Care, IntelliHEALTH ONTARIO

Shaping the solution: Progressive policies for better oral health

Evidence-based prevention

Research in the area of dental caries prevention demonstrates that some of the most cost-effective preventive oral health services include: community water fluoridation; fluoridated toothpaste; fluoride mouth rinses; fluoride varnish and dental sealants. Every dollar invested in adding fluoride to drinking water saves an estimated \$38 in dental care, a return on investment of 3,700 per cent.²⁵

Recommendation 1.

The CDHNS recommends that oral health be integrated into health care legislation, research, policy, strategy development and program planning across the provincial health sector.

Shift the focus from treatment to prevention

Given the preventable nature of most—if not all—oral diseases, the case for shifting the focus of oral health policy and programs from treatment to prevention is clear. Dental services have historically focused on treatment, due in large part to the great need for treatment and also to the traditionally curative role of the dentist. Treatment approaches alone, however, will never eradicate oral diseases.²⁴ Prevention is essential, not only for reducing morbidity and lost productivity associated with oral diseases, but also for saving money that could be put to more productive uses by private citizens and governments alike.

Fortunately, the tools for prevention are close at hand. Research has provided us with knowledge of the determinants, risk factors and pathogenesis of oral diseases. It has also provided us with evidence to support the effectiveness of many prevention strategies. For example, dental visits in early childhood are a proven cost-effective way to reduce the need for restorative care (such as fillings).²⁵ This is especially effective when the first dental visit occurs around the age of one, before any signs of disease are likely to have emerged. Caries risk assessment and appropriate preventive follow-up care effectively curtail the development of dental caries in children at risk.

Effective as such programs may be, it is widely recognized that clinical preventive and educational approaches by themselves can achieve only limited short-term gains across entire populations. In fact, depending on how these services are funded and delivered, they may actually widen health inequalities.²⁴ Instead, education and clinical prevention must be combined with progressive oral health policy, organizational change, community action, legislation, and advocacy to address the determinants of oral health²⁴ and achieve better oral health outcomes for all members of society.

World success stories

There has been a deliberate shift to prevention in some regions of the world, in response to the failure of traditional treatment-oriented approaches. In Scandinavian countries, where a dental delivery system is available to all, an approach that emphasized treatment rather than prevention was found to extend the life span of the tooth by about 10 years—a rather poor therapeutic result. In Sweden, policymakers responded by switching to a preventive approach, lowering rates of dental decay in children by 80 to 90 per cent, compared to children who received symptomatic treatment.²⁶ In countries such as Japan and Norway, where approximately 75 per cent of dental care is covered by public funding (compared to 5 to 6 per cent in Canada), more emphasis is placed on prevention for everyone, precisely because dental problems can be avoided with early treatment and because poor oral health is linked to so many chronic diseases.⁴

Momentum in Canada

We are beginning to hear from Canadian experts about the need to shift the focus from treatment to prevention of oral disease and promotion of oral health.

The following reports and papers call for a renewed emphasis on oral disease prevention in Canada:

- ▶ *Report on the Findings of the Oral Health Component of the Canadian Health Measures Survey 2007-09* (CHMS), 2010
- ▶ *Treatment of Preventable Dental Cavities in Preschoolers: A Focus on Day Surgery Under General Anesthesia*; Canadian Institute for Health Information, 2013
- ▶ *Oral health care for children – a call for action*; Canadian Paediatric Society Position Statement, January 2013
- ▶ *Staying ahead of the curve: A unified public oral health program for Ontario?*; Discipline of Dental Public Health, Faculty of Dentistry, University of Toronto, 2012
- ▶ *Putting Our Money Where Our Mouth Is: The Future of Dental Care in Canada*; Canadian Centre for Policy Alternatives (CCPA), April 2011

In response to the weight of evidence and growing urgency of oral health problems and disparities in Canada, several Canadian provinces have taken action:

Ontario: This province decided to improve access to preventive and early treatment for children up to age 17 by launching a \$45 million program as part of its poverty reduction strategy.⁴ For example, in Oxford County, dental hygienists offer fluoride varnish applications to all children 12 months and older who have been assessed and identified at high risk for caries. This preventive care is provided to children whose families participate in the Baby Oral Health Program, visit a preventive health unit clinic, or receive home visits through the province’s Healthy Babies, Healthy Children program. The dental hygienists use the caries risk assessment as an opportunity not only to identify at-risk children and provide them with fluoride varnish, but also to educate parents about the impact of family history and eating and snacking habits, as well as oral hygiene, on children’s short and long-term oral health.

Saskatchewan: In September 2011, the Saskatchewan government committed more than a million dollars to the *Enhanced Preventive Dental Services Initiative*, with a focus on preventing early childhood tooth decay in at-risk populations. The enhanced services include oral health assessments, referral and follow up, as well as fluoride varnish and dental sealants—all services within the dental hygiene scope of practice.

Alberta: In October 2012, Alberta Health Services announced an improvement to the Provincial Oral Health Action Plan that would focus on early childhood assessment, education, fluoride and dental sealants delivered in three parts: a preschool fluoride varnish program for at-risk children aged 12 to 35 months, a school-based fluoride varnish program for at-risk children in kindergarten to grade two, and a school-based dental sealant program for children in grades one and two.

Recommendation 2.

The CDHNS recommends that they be included as an active participant in all discussions regarding oral health planning in the province, along with other major stakeholders.

Recommendation 3.

The CDHNS recommends that a Chief Oral Health Officer for the Province of Nova Scotia be appointed as soon as possible.

Recommendation 4.

The CDHNS recommends that all publicly funded oral health programs in Nova Scotia undergo a thorough review as soon as possible.

Recommendation 5.

The CDHNS recommends that the N.S. Department of Health and Wellness examine and seek to emulate successes from other jurisdictions, where the reallocation of resources has demonstrated a reduction in oral diseases and associated costs.

Integrate oral health into primary health care

With a shift in focus from treatment to prevention comes an opportunity to re-examine how and where preventive oral health care services are delivered. The predominant model, in which most dental hygienists practice in private dental offices, does not facilitate preventive oral health care to meet the social-justice principles of universal access, equity and affordability to all.

Recommendation 6.

The CDHNS recommends that the N.S. Department of Health and Wellness investigate payment models for dental hygienists as outlined in *Primary Health Care Renewal—Action for Healthier Nova Scotians* and immediately amend the *N.S. Health Services Act* to recognize dental hygienists as service providers under the province's existing oral health programs.

On May 15, 2009 the Nova Scotia government took an important step in the right direction, proclaiming the *Dental Hygienists Act of Nova Scotia*. Under previous legislation, dental hygienists provided care only under the direct supervision of a dentist or in a public health setting. Under the new legislation, the barrier of “seeing a dentist first” was removed, facilitating the way for the delivery of preventive oral health services, including referrals for dental treatment for vulnerable populations by dental hygienists. This client-centred system allows dental hygienists to provide care in underserved areas, addressing a need that has long been recognized by oral health organizations, public health agencies and the College of Dental Hygienists of Nova Scotia.

Since that time, seven independent dental hygiene practices have been established in Nova Scotia, including three mobile service practices that provide dental hygiene services to Nova Scotians in their places of residence. While this represents a degree of progress, a major barrier remains. Dental hygienists are still not recognized as service providers under the *N.S. Health Services Act*, so they are not able to bill under provincially funded programs. As a result, this barrier impeded members of the public from being able to access preventive oral health care.

A report from the Canadian Dental Hygienists Association, *Pathways to Support Oral Health of Canadians* (2008), states that the current model of delivery is not working for Canadians with incomes below the national median and no dental insurance. “There is a need for increasing... access to oral health services and integrating them with other health services. Dental hygienists are ideally positioned to assume diverse roles in such an endeavor given their primary focus on health promotion and the provision of preventive and therapeutic services.”²⁷

Integrating oral health care services into Nova Scotia's primary health care system offers the ideal opportunity to provide preventive oral health services in venues that are more accessible to families. This would align Nova Scotia with the many jurisdictions that recognize oral care as an integral component of universally accessible primary health care, as defined by the World Health Organization (WHO) in its 1978 *Alma-Ata Declaration on Primary Health*.³⁶ Given oral health's importance to overall health, integrating preventive oral health care into the primary health care system is also an important step to achieving the WHO's goal of “Health for All.”

Although the concept of universally accessible primary health care gained international traction following the WHO declaration, funding, organizing and delivering these services was not a high priority in Canada until the early 2000s. Over the past decade, Canadian provinces and territories have implemented primary health care reforms to improve the quality and outcomes of care²⁸ and the idea of community-based primary health care has gained prominence. This is defined as a broad range of primary prevention and primary care services offered by a range of health care professionals in a range of community settings. Preventive oral health care delivered by dental hygienists working in multi-disciplinary teams in community settings fits within the framework of community-based primary health.

This concept was recognized more than a decade ago in Nova Scotia, by the Advisory Committee on Primary Health Care Renewal (ACPHCR). Struck in 2001 and chaired by David Rippey, the committee released a report, *Primary Health Care Renewal—Action for Healthier Nova Scotians*, noting that **dental services should be included in the foundation of the province’s primary health care system**. The report envisioned a primary health care system in Nova Scotia that would be community based, family focused, person centered, comprehensive, responsive, accessible, integrated and collaborative.²⁹

Progress has been made toward this vision, with the creation of 127 collaborative interdisciplinary teams (IPC) in Nova Scotia, many located in communities where access to primary care is a challenge. Most of these teams consist of a physician, nurse practitioner and, in some cases, a family practice nurse, with a plan to add other disciplines over time. As yet, however, there has not been any progress in terms of including dental hygienists on these teams, even though doing so would dramatically increase access to preventive oral health care for individuals and families who lack access to traditional dental care offered in dental-office settings. As the Conference Board of Canada notes in its 2014 report, *Getting the Most Out of Health Care Teams: Recommendations for Action*, “Over the past decade there has been increased uptake of the interdisciplinary team model for delivering primary care services. However, so much more could be done. We need to engage all the relevant players, including governments, administrators, providers, and patients.”³⁰

In order to help Nova Scotians prevent oral diseases and their associated complications, discussions about how to incorporate dental hygienists on collaborative interdisciplinary primary health care teams in the province must take place. This is in keeping with the recommendations of the Rippey report and the Canadian Dental Hygienists Association.²⁷

Recommendation 7.

The CDHNS strongly recommends that dental hygienists be included in the primary health care system as key preventive therapists who contribute meaningfully to collaborative interdisciplinary health care teams.

Optimize dental hygiene to full scope of practice in primary health

Dental hygienists are the only health care professionals whose primary function continues to be the prevention of oral disease and the promotion of oral wellness.³¹ This focus on prevention clearly suits dental hygienists to a key role in primary health care—particularly when given an opportunity to work to their full scope of practice (see page 3).

Recommendation 8.

The CDHNS recommends that Nova Scotia invest in workforce innovations that optimize the dental hygiene scope of practice in non-dental community-based settings.

The private practice model of traditional dental care delivery, based on fee for service, primarily emphasizes the therapeutic care provided by dental hygienists, often underutilizing their preventive and educational skills. The way this oral care is structured and the payments reimbursed—by private and public insurers alike—can limit dental hygienists’ opportunity to work to the full scope of their education and abilities. This is partly due to a continued focus on treatment rather than prevention, in insured dental coverage, which has constrained dental hygienists when conducting oral screening assessments and providing preventive guidance and advice.

New models of service delivery that embed dental hygienists in accessible non-dental community and primary health care settings—to their full scope of practice as health professionals with the ability to assess oral health, proactively identify and address disease risks, and work collaboratively with other providers—have the potential to eliminate disparities and dramatically improve outcomes in oral health for a significant component of the Nova Scotia population.

There has been much research in the United States on workforce innovations that have the potential to increase access to preventive oral health services. The Robert Wood Johnson Foundation released a series of influential reports on programs based in primary health care settings with dental hygienists as key players. One report, *Dental Professionals in Non-Dental Settings*, assessed nine programs that shared the logic that increasing access to preventive care lowers the adverse outcomes of poor oral health—including decay, the need for restorative care, and dental-related emergency room visits. In these programs—located in such settings as community centres, schools, and parent resource centres—**dental hygienists provided preventive services, established referral relationships with local dentists, and acted as patient navigators and case managers.** The researchers concluded that all nine programs were feasible and could plausibly increase access to oral health services by providing them in settings that are frequented by underserved populations. Dr. David Krol, the senior program officer who led the research team said, “These reports identify programs and approaches that we should embrace as guideposts.”³²

Creating a path forward: Steps to better oral health

Envisioning a healthier future

The CDHNS has a vision of a health care system that fully embraces oral health as a key to overall health and recognizes the vital role of dental hygienists in achieving this vision.

A variety of accessible settings

The CDHNS envisions a health care system that utilizes dental hygienists to promote oral health and provide preventive and therapeutic oral health care services to their full scope of practice in a variety of universally accessible non-dental community settings that make it convenient, and in some cases even possible, for people to receive oral health care. The key principle is to provide the service in locations and at times that work for people's busy lives and take advantage of pre-existing programs and infrastructure. These settings include but are not limited to:

- diabetes education centres
- cancer care and rehabilitation centres
- registered daycares, early childhood education centres and schools
- community health and wellness centres
- seniors' and long-term care facilities
- family practice clinics

Early childhood examples

Early childhood caries is a growing concern in Nova Scotia, but there is every opportunity to cost-effectively reduce its incidence in the future by involving dental hygienists in providing preventive oral health care and appropriate oral health information (anticipatory guidance) to pregnant women and parents of children up to the age of six in community settings.

First visit by first birthday

The CDHNS envisions implementing such preventive protocols as “First Visit by First Birthday”—universally advocated by dental and pediatric organizations—in Nova Scotia. This protocol is designed to prevent disease before it starts, by assessing a child's risk around the time of the first tooth eruption. This “first visit” includes an oral examination, done in a knee-to-knee position with the parent holding the child. It also includes a caries risk assessment, preventive counselling and anticipatory guidance. For example, if a child is identified as high risk, the dental hygienist provides the parents with information about steps they can take to reduce the child's risk and schedules fluoride varnish applications to prevent caries.

Preventive oral health services like “First Visit by First Birthday” are highly accessible when offered in community settings alongside other health services. This is particularly important for reaching those high-risk children who are least likely to access a private dental office. The program fills another important gap—staff in many private dental offices, accustomed to seeing children around age three, may have limited experience, and may not be comfortable, with seeing children this young.

Recommendation 9.

The CDHNS recommends that all children and their caregivers in Nova Scotia have access to risk assessments and anticipatory guidance with a dental hygienist within six months of the first tooth eruption or by their first birthday.

Although early examination is recommended, the first-visit protocol is not routinely practised and is frequently misunderstood. All aspects of this protocol fall perfectly within the scope of a dental hygienist, yet this is not commonly acknowledged within the dental or health professions. This golden opportunity to utilize dental hygienists to provide early identification and therapy, allowing dentists more time to deal with the treatment issues, has social and economic benefits.

Recommendation 10.

The CDHNS recommends that Nova Scotia implement a mandatory oral health screening program for all children in the province prior to school entry.

Mandatory primary screening

Reducing children's decay rates requires effective preventive programs, yet there is no legislation in Nova Scotia mandating oral health examinations for children entering the school system. As a result, children with decayed or abscessed teeth who do not or who are unable to access the dental system are not identified until an emergency arises. Meanwhile, their ability to eat, sleep, speak and learn is compromised by undetected, untreated dental problems. The CDHNS envisions a mandatory oral health screening and referral program in Nova Scotia, similar to the province's vision screening and referral program, to ensure that children with oral health problems are identified and treated prior to starting school, and that at-risk children receive appropriate preventive care. Some of the most cost-effective preventive measures include appropriate use of fluoridated toothpaste, fluoride mouth rinses, fluoride varnish, and dental sealants. Improving children's oral health status before entering school will enhance their overall health and educational experience.

The diabetes example

Given the reciprocal relationship between diabetes and periodontal disease, and the high rates of diabetes in Nova Scotia, there is a clear need to integrate oral health care into diabetes management in the province.

Imagine a diabetes education centre, where newly diagnosed patients see a range of health care professionals for information on insulin, blood sugar, diet and foot care. This is the right place for a dental hygienist to assess patients' oral health and provide them with education about their increased risk of periodontal disease and steps they can take to prevent it. This is particularly crucial for patients with no access to dental care.

Recommendation 11.

The CDHNS recommends that all long-term care facilities in Nova Scotia have access to a dental hygiene coordinator.

Seniors' oral health example

In a 2008-09 survey, Dalhousie researchers found that Nova Scotian adults (45 years and older) living in rural and urban long-term care facilities had high rates of oral disease with little access to dental care or dental coverage.³³ The study showed a clear need for prevention, education and treatment in this population, especially with the expected growth in the aging population of this province. Residents would benefit tremendously, if dental hygienists were employed to make full use of their scope of practice in these settings, to provide entry assessments, referrals for treatment, therapeutic services, and in-service education, and to facilitate the development of daily oral hygiene protocols for residents.

Challenges to overcome

The CDHNS recognizes there are challenges to overcome for dental hygienists to be recognized and fully integrated within Nova Scotia's primary health care system:

Lack of awareness of the dental hygienists' full scope of practice. Stakeholder interviews revealed that the biggest challenge is the public's limited knowledge of/exposure to the dental hygienists' full scope of practice ("public" includes political decision makers, health professionals, educators and many others). This is mostly due to dental hygienists' historical association with private dental practice and the limited amount of time allotted by the employer for a dental hygiene appointment, which is therefore focused primarily on treatment rather than prevention and education. This stereotypical view of the dental hygienist as the "tooth cleaner" in private dental offices has resulted in a poor understanding of the full competencies of the dental hygiene profession.

Lack of a public funding model. The means of funding or reimbursing dental hygienists needs to be addressed. In *Primary Health Care Renewal—Action for Healthier Nova Scotians*, David Rippey outlined three possibilities in terms of providers' relationships with primary health care organizations: direct employment, a contractual agreement, or an informal relationship while maintaining a privately owned self-administered private practice.

Professional misunderstandings. Research has determined that historical professional rivalries and failure to understand each other's roles often present barriers to inter-professional collaboration. Not unlike the nurse-physician relationship, the dental hygiene profession has been challenged by the dental profession—often due to a misunderstanding or limited knowledge of dental hygiene's scope of practice.

Lack of inter-professional training. A report out of McMaster University, *Strengthening Primary Health Care*, states that inter-professional training needs to be strengthened in Nova Scotia.³⁴ The Dalhousie School of Dental Hygiene provides some opportunities for students to engage in inter-professional training but acknowledges that more could be done. It would be particularly helpful for nurses and physicians to learn more about oral health issues and how they can encourage their clients to access preventive oral health care.

Low awareness of the importance of oral health to overall health. While media reports and the Internet overwhelm consumers with information about healthy eating and physical activity, there is little attention paid to the influence of oral health on long-term overall health, and how poor oral health contributes to a variety of chronic diseases.

Low awareness of the benefits of prevention. In the past, policymakers and the public have placed less emphasis on the importance of prevention, in terms of individual health and savings to the health care system.

The CDHNS will work closely with stakeholders in Nova Scotia's professional education and health care sectors to address these challenges and further the integration of oral health and dental hygienists into the primary health care system in Nova Scotia.

Recommendation 12.

The CDHNS recommends that health professional associations and regulatory authorities work collaboratively with educators to develop stronger inter-professional training and continuing professional education programs.

Recommendation 13.

The CDHNS recommends that the N.S. Department of Health and Wellness place greater emphasis on the importance of oral health in its health promotion policies and public education programs.

Recommendations for action

Following extensive research efforts and consultations with stakeholders, the College of Dental Hygienists of Nova Scotia developed a series of recommendations for transforming and improving Nova Scotians' oral health care outcomes.

Recommendation 1. Oral health should be integrated into health care legislation, research, policy, strategy development and program planning across the provincial health sector in consultation with appropriate stakeholders, including CDHNS.

Recommendation 2. CDHNS should be included as an active participant in all discussions regarding oral health planning in the province, along with other stakeholders.

Recommendation 3. A Chief Oral Health Officer for the Province of Nova Scotia should be appointed as soon as possible.

Recommendation 4. All publicly funded oral health programs in Nova Scotia should undergo a thorough review as soon as possible.

Recommendation 5. N.S. Department of Health and Wellness should examine and seek to emulate successes in other jurisdictions, where the reallocation of resources has demonstrated a reduction in oral diseases and associated costs.

Recommendation 6. N.S. Department of Health and Wellness should investigate payment models for dental hygienists as outlined in *Primary Health Care Renewal-Action for Healthier Nova Scotians* and amend the *N.S. Health Services Act* to recognize dental hygienists as service providers under the province's existing oral health programs.

Recommendation 7. Dental hygienists should be included in the primary health care system as preventive therapists who contribute meaningfully to collaborative interdisciplinary health care teams.

Recommendation 8. Nova Scotia should invest in workforce innovations to optimize dental hygiene scope of practice in non-dental community-based settings.

Recommendation 9. All children and their caregivers in Nova Scotia should have access to risk assessments and anticipatory guidance with a dental hygienist within six months of the first tooth eruption or by their first birthday.

Recommendation 10. Nova Scotia should implement a mandatory oral health screening program for all children in the province prior to school entry.

Recommendation 11. All long-term care facilities in this province should have access to a dental hygiene coordinator.

Recommendation 12. Health professional associations and regulatory authorities should work collaboratively and with educators to develop stronger inter-professional training and continuing professional education programs.

Recommendation 13. N.S. Department of Health and Wellness should place greater emphasis on oral health in its health promotion policies/public education programs.

Conclusion: The time is right

In Nova Scotia, we are facing overwhelming oral health needs in the context of an aging society, a growing recognition of the importance of oral health to overall health, and a health care system that is reforming both primary health and public health.

Nova Scotia Primary Health Care's strategic priority is to ensure Nova Scotians have access to client centred, comprehensive primary care delivered by inter-professional health care teams with the capacity to address all needs. This aim does not ring true if oral health professionals, with a scope of practice embedded in wellness and disease prevention, are not behind the "one door" portal to overall health.

At the same time, Nova Scotia Public Health is moving towards primordial prevention, policy and research, with a focus on oral health surveillance, population health assessment and oral health policies. With this shift, the role and number of provincial public health dental hygienists is diminishing, posing a risk that their health promotion and disease prevention services will be lost to the system. But this does not have to be the case. Many of the services traditionally provided by public health dental hygienists can be offered in primary health care settings to strengthen the focus on oral health promotion and disease prevention throughout Nova Scotia's health care system.

Dental hygienists are critical partners on collaborative inter-professional primary care teams, uniquely qualified to help improve the oral health of Nova Scotians. As preventive therapists, health educators and holistic care providers, dental hygienists are positioned to contribute meaningfully to individual and community oral and overall health in a variety of settings where their practices can be fully matched with primary health care principles of universal access, equity and affordability.

The CDHNS recently celebrated the fifth anniversary of the *Dental Hygiene Act*, which enables Nova Scotians to access dental hygiene services directly. Members of the College have indicated their support and readiness for the chance to fully engage with the primary health care system. In an online survey, dental hygienists shared such views as the following:

"Our education and professional development place us at the forefront of prevention rather than rehabilitation. We can provide valuable preventive information from pre-birth at prenatal classes to the elderly patient. We can also provide very cost-effective therapies to all demographics. I believe that one of our goals is to work collaboratively with other health care providers to provide the best possible outcome for the client." CDHNS Member Survey on Dental Hygienists as Primary Care Providers 2014

The CDHNS believes that the time is right to integrate oral health into a seamless system that advances health promotion, disease prevention and therapeutic care through timely access to dental hygienists with the capacity and willingness to collaborate with other health disciplines.

It's the **right time** to bring the **right provider** (dental hygienists) offering the **right services** (oral health preventive care) under the comprehensive umbrella of primary health care.

Appendix A: Definitions of terms

In this document, the following terms are defined as follows:

Access to oral health care is the ability of an individual to gain entry to an oral health care system that promotes oral health and provides preventive, therapeutic, curative and rehabilitative services.

Anticipatory guidance refers to providing timely information about early childhood oral health that corresponds to key developmental milestones in the life of a child.

Barriers to care are those issues or factors that inhibit access to health care, including socioeconomic status (income, education), oral health literacy, language, cultural norms and preferences, geography, transportation, perceived need for care and other factors.

Caries risk assessment tools, as described by the American Academy of Pediatric Dentistry, are used to assess the level of risk for the development of caries (cavities) in infants, children and adolescents. These tools are based on a set of evidence-based clinical, environmental and general health factors.

Collaborative practice is the process of interaction among professionals from two or more health disciplines, working with the patient to provide comprehensive health services and improve health outcomes.

Dental hygienists are licensed health care professionals whose primary function is the delivery of services that promote oral health and prevent and control oral diseases, with the larger aim of promoting individuals' and communities' overall health and wellness.

Inter-professional primary care team (IPC) is two or more professionals from different disciplines who work together to provide health services.

Primordial prevention consists of actions to minimize future hazards to health by inhibiting underlying environmental, economic, social, and behavioral factors known to increase the risk of disease.³⁵ It addresses broad health determinants, rather than attempting to prevent individuals' exposure to risk factors, which is the goal of primary prevention. For example, outlawing alcohol represents primordial prevention, while a public education campaign about the risks of drinking represents primary prevention.

Return on investment is the medical spending on disease treatment that is avoided by investing in disease prevention and wellness promotion.

Root planing is a procedure to remove cementum, or surface dentin that is rough, impregnated with calculus or contaminated with toxins or microorganisms from the root of the tooth. (*Dental hygiene: Theory and Practice*/ [edited by] Michelle Darby and Margaret M. Walsh.- 3rd ed. pg. 1238)

Scaling is instrumentation on the crown and root surfaces of the tooth to remove oral biofilm (plaque), dental calculus (hard deposits), and extrinsic (surface) stains without the intentional removal of tooth surface. (*Dental hygiene: Theory and Practice*/ [edited by] Michelle Darby and Margaret M. Walsh.- 3rd ed. pg. 1239)

Underserved populations include people living in poverty, the working poor, the homeless, those on social assistance, people with disabilities, refugees, the institutionalized, some immigrant groups and those living in rural and isolated areas.

Appendix B:

Alma-Ata, primary health and health for all

Primary health care and health for all

In September 1978, the World Health Organization (WHO) and its member nations sponsored an International Conference on Primary Health Care in Alma-Ata in the former Soviet Union. The conference became well known for the *Alma-Ata Declaration on Primary Health Care*, a major milestone of the twentieth century in the field of public health. It identified primary health care as the key to the attainment of the WHO goal of “Health for All.”³⁶

Primary health has continued to be a priority for the WHO. In its 2008 report, *Primary Health Care Now More Than Ever*, the WHO recognized that health equalities would not be reduced and social justice would not be achieved unless health systems adopted the principles of universal access and coverage.³⁷

Alma-Ata definition of primary health care:

“Primary health care is care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country’s health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family, and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first elements of a continuing health care process.”

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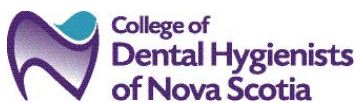
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