Canadian Academy of Health Sciences
Académie canadienne des sciences de la santé

Prospectus for a Major Assessment on Improving Access to Oral Health Care for Canadians

Prepared by the
Canadian Academy of Health Sciences

March 2008

About the Canadian Academy of Health Sciences

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The Academy was created in 2004 and modelled on the Institute of Medicine of the United States that, since 1970, has worked outside the framework of government to ensure scientifically informed analysis and independent guidance on a variety of important public policy issues. The IOM's mission is to serve as adviser to the nation to improve health. The Institute provides unbiased, evidence-based, and authoritative information and advice concerning health and science policy to policy-makers, professionals, leaders in every sector of society, and the public at large. Below are examples of key IOM reports that have had an international impact on health policy:

- To Err is Human: Building a Safer Health System (1999)
- Stem Cells and the Future of Regenerative Medicine (2001)
- Crossing the Quality Chasm: A New Health System (2001)
- Who will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century (2002)
- Preventing Childhood Obesity: Health in the Balance (2004)

While the Canadian Academy is earlier in its development than the IOM, it brings together an unusual diversity of talent among its Fellows who come from many backgrounds, both within and external to the health sector: dentistry, medicine, nursing, allied professions, the natural, social, and behavioural sciences, as well as law, administration, ethics and the humanities.

The process of the Academy's work is designed to assure appropriate expertise, the integration of the best science and the avoidance of bias and conflict of interest, the latter being a frequent dynamic that confounds solutions to difficult problems in the health sector. Building on the experience of the IOM, Academy reports undergo extensive review and evaluation by external experts who are anonymous to the committee, and whose names are revealed only once the study is published.

This prospectus relates to a challenging issue facing Canada: improving access to oral health care for Canadians.

Introduction

Although the oral health status of people in western societies has improved overall in the last three decades, oral diseases, especially dental caries and periodontal diseases, continue to be major problems. These diseases are still highly prevalent in the population and affect people throughout their life. Dental caries, for instance, is the most common chronic childhood disease, with a prevalence approximately five times that of asthma[1]. Periodontal diseases, such as periodontitis, generally occur later in life but affect most adults in western societies. Caries and periodontal diseases have severe consequences as they both lead to loss of teeth and ultimately, to edentation. In Quebec, for which the best Canadian data sets exist, 14% of the adults aged 35-44 years have lost all their teeth, one of the highest rates in the world[2].

Even though oral diseases are widespread in the population, there are profound disparities in our society and their burden is very high in disadvantaged groups[3]. Canada lacks national epidemiological data, although for the first time, oral health markers are included in the current Canadian Health Measures Survey, with the data projected to be available in late 2009. Meanwhile, provincial studies show that poor oral health is concentrated among individuals of lower socioeconomic status, including the unemployed, “working poor”, First Nations, recent immigrants and the elderly. In Quebec, for instance, children aged 5-6 from low-income families (less than $30,000 per year) have more than twice the caries rates of children from more affluent families (over $50,000 per year). These disparities between poor and non-poor continue into adolescence and adulthood[4-6].

Dental caries and periodontal diseases have severe consequences on health and quality of life: they not only lead to tooth loss and edentulism as mentioned earlier, but they also cause pain and suffering. Furthermore, these conditions compromise an individual's ability to eat and appear to reduce life expectancy through effects on nutritional status[7,8]. In brief, dental diseases deeply affect people's overall quality of life and have profound social and economic impacts on society: in the USA for instance, children lose more than 51 million school hours each year because of a dental problem, and employed adults lose over 164 million hours of work due to dental issues[1].

In addition, there is increasing evidence of associations between oral and systemic diseases. The mouth is one portal of entry for infections that may disseminate to other parts of the body. For instance, oral bacteria such as *A. Actinomycetemcomitans* or *E. corrodens* can cause infective endocarditis, while bacteria from infected dental pulps can cause brain abscesses, as some case reports show. Furthermore, recent studies have shown associations between periodontal infections and various health problems such as diabetes, heart disease and stroke, and low birth weight[1]. Oral health is thus part of general health and the oral cavity and its care should not be separated from the rest of the body.

Despite the high prevalence of oral diseases and the links between oral and general health, dental caries and periodontal diseases are not generally covered by Medicare in Canada. As a consequence, socioeconomic status – instead of need for treatment – is a strong predictor of access to care: the lower the income, the less often people consult a dentist for preventive care[9] and the longer they wait when they experience a dental problem[10]. As an example, in 1999 the richest category of people in Canada visited the dentist approximately

twice as often as those in the poorest category, even though the latter had more disease and much higher levels of health care needs[11]. This problem of access is also acute among poor children who often need major sedation for the treatment. However, the long waiting lists at paediatric dental clinics mean that these children must generally wait for months to have a chronic infection treated.

In summary, use of Medicare is proportional to need, but use of dental care is inversely proportional to need and directly proportional to income. This has severe consequences on the population: the poor have more caries, more teeth left untreated and finally extracted than the more affluent; low access to professional services also deeply affects the quality of life and overall health of low-income Canadians.

The federal government has implemented programs to lower the financial barrier and improve access for specific groups in the population (the Armed Forces, First Nations and Inuit populations, the Royal Canadian Mounted Police, Veterans, incarcerated people, and refugees), but these groups are not the only ones in great need of treatment. There are some provincial programs for people receiving social assistance and for children, but these programs limit the coverage provided and vary considerably in terms of the benefits they cover. For example, people receiving social assistance in Nova Scotia have access to emergency treatments only, while in Ontario, children are only covered for urgent needs. The programs for people receiving social assistance exclude the "working poor", who represent approximately 2.5 million people in Canada[12], and their dependents. In addition, the programs for children generally exclude those aged 10 or older. Therefore, the proportion of the poor and children who are covered is small.

Enhancing oral health and ensuring timely access to quality dental services of all citizens has become a public health priority in most western countries. In the UK, health inequalities were highlighted in 1998 by a commission that led the British government to make a commitment toward their reduction[13]; in the USA, the 2000 Report of the Surgeon General highlighted oral health disparities and called for a national plan of action[1]. It is time for Canada to tackle this problem and improve access to dental services of all citizens.

What questions will this assessment address?

- To what extent does the oral health of under-privileged groups affect their overall health and quality of life, including the effect of oral health on social and economic outcomes?
- What problems of access to care are encountered by under-privileged Canadians?
- What changes to Canadian oral health care delivery systems are necessary to improve access for under-privileged Canadians?
- How can these changes be made?

How is the assessment important to the Canadian public policy agenda?

- Oral health disparities are contrary to the values of our society as noted in the 2002 Royal Commission on the Future of Health Care in Canada, namely equity, fairness and solidarity. The Commission also insisted that publicly funded health care should deliver care efficiently.
- Timely access to health services is currently a central issue in the Canadian public policy agenda, and recently, the issue of timely access to dental services has been raised in Canada and the United States. This was prompted by media reports of cases of death due

to dental disease that could have been prevented if the victims had been able to access dental care in a timely fashion.

- There is increasingly strong evidence of direct links between oral health – particularly periodontal health – and cardiovascular disease, low birth weight, diabetes, obesity and other conditions. This suggests that the management of oral health must be better integrated into the system responsible for the management of general health and disease.

How is the assessment likely to be used in a non-governmental context and by whom?

- Professionals: the assessment will assist oral health and other professional organisations in developing new policies and service models. It will provide a basis for negotiations with governments and health authorities on the provision of oral health services.
- Hospitals and community clinics, health networks: the assessment will assist these organisations, many of which already provide some oral health care, in determining the types of service and budget models that will best serve their clients.
- Advocacy groups: anti-poverty coalitions and representatives of vulnerable groups in the society will use the assessment as a tool for promoting better access to dental services.
- Academics: the assessment will be used as a teaching tool and a document of reference for further research.

What socioeconomic benefits to Canadians could result from an assessment that enables informed decision-making on the part of governments and others?

- Better oral health and quality of life for Canadians.
- Improved life expectancy and years of good health.
- Reduced absence from the class-room and from work, resulting in improvements in learning and in economic productivity.
- Improved productivity in the oral health sector by redeployment of some resources to segments of the population with high need.
- Decreased inequities in oral and general health among Canadians.

To what extent does the existing state of knowledge allow for an assessment?

- There is a body of literature on the oral health of disadvantaged groups in Canada and elsewhere in the industrialized world.
- There is literature describing existing oral health care delivery systems and the extent to which they do and do not meet the oral health care needs of disadvantaged groups.
- Data from the Canadian Health Measures Survey will provide an opportunity to address the needs of specific disadvantaged and advantaged groups, their current access to dental health care and potential ways of improving access.

Where does the existing expertise reside?

- Academia
- Professional organizations
- Government including Health Canada, the Public Health Agency of Canada & provincial health departments
- Private insurance companies
- Managed care groups in the United States and other programs internationally
- Workers' not-for-profit third party payment schemes: health insurance organisations set up by Unions to cover members and families (e.g. “Delta Dental” plans in the US).

Potential Scope

The scope and deliverables of the Assessment will be based on joint agreement between CAHS and the Sponsors. The general intent is to propose a set of conclusions about how access to oral health care can be improved for Canadians.

The procedures to conduct the Assessment will be determined by the Assessment Panel and may include receipt of written submissions, open and closed meetings of the Panel, and workshops/forums involving the Panel, Sponsors and leading authorities within and outside of Canada.

It is proposed that the Assessment begin with a workshop will be launched in September 2008 (see appendix), followed by the Assessment, the final phase of which will incorporate data from the National Health Survey.

Assessment deliverables will include:

- Assessment of the current oral health status of Canadians, including the relationship of oral health status of population subgroups and their access to dental services
- Review of the evidence linking oral health with quality of life, overall health and productivity
- Review of the characteristics of effective oral health programs internationally for lessons that are transferable to Canada. This would include an assessment of the influence of international agreements which could have an impact on the choice of solutions (e.g. NAFTA, GATT)
- Other elements deemed relevant by the parties to the issue.

Tentative Workplan

Phase I: **Study Definition:**

The CAHS Standing Committee on Assessments together with the Assessment Sponsors will define the precise nature of the question, the scope of the Assessment and the Assessment deliverables.

Phase II: **Panel Formation:**

All Sponsors will be invited to suggest potential members of the Assessment Panel to the Standing Committee on Assessments who will determine membership of the Assessment Panel. The Chair and approximately 25% of the members will be Fellows of CAHS (see Appendix). The remaining 75% of members will be selected from the best Canadian and international experts in the field and will include public representation.

The proposed panel will be posted on the CAHS website for comment and suggestions prior to finalization. Final approval of the Assessment Panel will rest with the CAHS Council.

Phase III: **Major Forum:**

To launch the Assessment, the Academy will convene a workshop on the subject in Toronto in September 2008 including Panel members and national experts. The Forum will be open only to CAHS Fellows and Sponsor representatives.

Phase IV: **Panel Deliberation:**

The Panel together with support staff will conduct their work. This will include environmental scanning, receipt of written submissions by interested parties, closed meetings, open hearings with presentations from interested parties, and deliberations.

Phase V: **External Review:**

A draft report will be forwarded by CAHS to an External Review Panel selected by the Standing Committee on Assessments. Sponsors will also be invited to suggest members of the External Review Panel. The Assessment Panel will subsequently revise its report based on recommendations from External Review. Approval and acceptance of the final report will rest with the CAHS Council.

Phase VI: **Dissemination:**

The final report will be distributed widely in print and posted on the CAHS web site. Other methods of dissemination, based on agreement with the Sponsors, will be utilized. These may include presentations, town hall meetings, non-print media, etc. in order to maximize the impact and uptake of the conclusions.

Budget and Timeline

Estimated cost: $500,000

The final budget will depend on scope and variable costs such as number of meetings and hearings. The final budget will be agreed upon in advance through written contract between CAHS and the Sponsors. It is anticipated that the funding costs would be shared among a number of government and non-governmental agencies heavily impacted by this complex set of issues, leading to a lower cost per individual sponsor.

Assessments of this scope require approximately 18 months. Assuming confirmed sponsorship by mid-2008, the Assessment will be launched with a workshop in September 2008 and a completed report is expected by December 2009.

Potential Assessment Sponsors

Many organizations at all levels are grappling with the issue of ensuring high quality care to Canadians with chronic illness. Some of those who have an interest in this issue and who might wish to join a partnership to sponsor this assessment include:

- Canadian Dental Association
- Health Canada
- Provincial Health Ministries
- CIHR and several institutes lead by the Institute of Musculoskeletal Health and Arthritis (IMHA)
- Provincial colleges and licensing boards
- Royal College of Dentists of Canada
- Foundations

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