TORONTO STAFF REPORT

July 11, 2003

To: Board of Health

From: Dr. Sheela V. Basrur, Medical Officer of Health

Subject: Mobile Dental Program for Low-Income Seniors Living in Long-Term Care Facilities

Purpose:

To provide the Board of Health with information on the cost to fully harmonize mobile dental services for low income residents of long-term care facilities (LTC) at the current level of service in existence in the South Region, the health benefits of such a service, and eligibility criteria to ensure that the program targets only those seniors who are unable to afford such services elsewhere.

Financial Implications and Impact Statement:

There are no financial implications arising from this report. However, if the City were to harmonize in 2004 the mobile dental program for seniors living in long-term care facilities, including the City operated Homes for the Aged, to the same level of service that currently exists in the South Region, an additional estimated amount of $470,450 (gross and net) annually (7.5 staff positions) and $14,000 (gross and net) in one time costs, would be required over and above the $100,000 approved by Council in 2003 for expansion of this program.

The Chief Financial Officer and Treasurer has reviewed this report and concurs with the financial impact statement.

Recommendation:

It is recommended that this report be received for information.

Background:

During the 2003 budget process, Toronto City Council approved the addition of $100,000 to the Toronto Public Health operating budget to expand the mobile dental program to regions of the city that did not receive this service. The $100,000 was used to recruit 2 dental assistants and to purchase equipment and supplies, to harmonize the program city-wide. Residents of long-term care facilities across the city, including those in the South Region will receive services every two years. This has resulted in a reduction of services to the residents in the South Region, as these residents received yearly services prior to harmonizing the program.

Since the funds were insufficient to fully harmonize the program to the level of service that existed in the South Region, the Medical Officer of Health was requested to "report to the Board of Health and to City Council in June of 2003, providing criteria which ensures that the Mobile Dental Program targets seniors in long-term care facilities who are not able to afford such services, and to allow staff time to assess the program for consideration of funding in 2004, such report to include the health benefits of, and financial costs of providing the Mobile Dental program to low income residents in long-term care facilities across the entire City, including the City's Home for the Aged, at the level of service that currently exists only in the South." This report is in response to that request.

Comments:

Seniors represent one of the fastest growing segments of the population. Due to improved oral health, more seniors are maintaining their natural dentition. In fact, it has been stated that this is the first time in history that more seniors are dentate than are edentulous. Most seniors expect to be able to retain their natural dentition for life. Seniors with their natural dentition require more supportive dental care, including dental treatment if they are to retain their teeth. If they do not receive this care, then inevitably they will experience more dental diseases resulting in pain and infection.

Health Impacts:

It has been shown in the literature that institutionalized seniors have poorer dental health when compared with seniors living independently. There are a number of reasons for this. Residents in long-term care facilities are dependent on nursing and other care-giving staff for assistance with daily activities. This includes oral hygiene. This makes the elderly dependent on the views, knowledge, ambitions, and priorities of the staff. Nursing personnel appear to perceive oral health as one of the most difficult parts of their work. Hence, the oral health needs of institutionalized seniors are often viewed as lower priority, and are thus ignored and neglected. Staff in these facilities also acknowledge that they do not have the required skills and knowledge to recognize oral disorders and assist with oral hygiene (1) (2). This results in the deterioration of the residents'oral health. The greatest single dental care need among institutionalised dentate elderly is for routine oral hygiene, while for denture wearers the primary need is for the adjustment of loose or ill fitting dentures.

Oral health is important for the general health and well-being of all segments of the population. The teeth and mouth are integral to an individual's functional and social abilities. Poor oral health is also a factor contributing to, or associated with, various health problems such as nutritional deficiency, infections of the endocardium, (heart lining), meninges, (lining of the brain and spinal cord), mediastinum (area around the heart and lung), vertebra, liver and in prosthetic joints in old and frail adults (3). A randomised clinical trial, studying the effect of professional oral health care on the elderly living in nursing homes, showed that such care was associated with a reduction in the prevalence of fever and fatal pneumonia (4). A significant association between self reported bleeding gums, presence of dentures and known cardio-vascular disease, has been cited in international studies (5). Thus, daily oral hygiene practice and receipt of regular dental care are cost effective means of maintaining oral health and minimizing morbidity of oral infections and their non-oral sequelae (6). In addition, activities of daily living and cognitive functions show a tendency to improve with oral care.

The mobile dental program:

The objective of the mobile dental program is to increase the dental knowledge of staff in institutions so that they feel comfortable in administering daily oral hygiene to the residents, to assist with the development of customized oral hygiene regimens for residents, to label the dentures of residents in long-term care facilities so as to minimise loss or misplacement of dentures and to offer necessary dental care (preventive and treatment) to those seniors who cannot afford to pay for these services elsewhere.

The current service delivery model is as follows. A team consisting of a dental hygienist and a dental assistant screen the residents of the LTC facility to determine the need for dental services. This is the same team that screens children in schools. This team, through the administrator of the facility, makes appropriate client referrals to private or TPH dentists for treatment services. Subsequently a team of dental assistants delivers oral hygiene services to the residents, educational sessions to the staff and cleans and identifies dentures. This approach maximizes the use of lower cost dental professional staff for activities not requiring the service of a dentist, thus limiting the use of higher cost dentists to those procedures requiring such expertise.

Eligibility:

Current eligibility criteria for dental treatment services requires that seniors must not have third party dental insurance, must have proof of residency in the City of Toronto, and an annual income of $16,750 or less for a single person, or $25,000 or less for a couple. The before tax low income cut off (LICO) for 2002 is $19,261 for a single and $24,077 for a couple. TPH dental staff work with the administration staff of the LTC facilities to ensure that only those clients who meet the eligibility criteria receive treatment services.

Costs:

In 2001- 2002, one mobile dental team served 23 LTC facilities in the South Region, and approximately 4,000 clients received services annually. At that time there was one dedicated team for mobile dental services consisting of 1 dental hygienist and 2 dental assistants. An

additional 50 institutions with approximately 8,000 clients have requested services from the mobile dental program. In addition, there are 10 city-operated Homes for The Aged with approximately 2,500 clients who require service. Therefore, the total number of clients to be screened and to receive preventive and educational services is 14,500.

To serve these institutions city-wide at the same level of service as existed in the South Region, (i.e. annually) would require additional 2.5 dental hygienists and 5 dental assistants. As well, there would be one time equipment costs and ongoing materials and supplies costs.

The estimated costs are as follows:

Expenditure Item	2004
2.5 Dental Hygienist @ 66,300 + 3% COLA	$170,722.5
5 Dental Assistants @ 53,345 +3% COLA	$274,726.8
Materials and Supplies	$ 25,000.0
Total Annual Recurring Costs	$470,449.3
One-time equipment costs	$ 14,000.0
Total	$484,449.3

It is difficult to estimate the need for additional dentists, as the health status of those clients in the facilities that are not currently served, is unknown. Toronto Public Health will try to accommodate clients requiring treatment services within the current complement of clinical dental staff. However, this may result in increased waiting lists or longer waiting times for other clients.

At its March 2003 meeting, City Council approved an additional $100,000 for the TPH operating budget to harmonize the program at a reduced level of service. This funding allows residents of LTC facilities across the city to be seen once every two years instead of annually.

Therefore in order to harmonize in 2004 the mobile dental program to the level of service that currently exists in the South Region, TPH requires an additional budget of $470,450 (gross and net) annually and $14,000 (gross and net) in one time costs over and above the $100,000 approved by Council in 2003.

Conclusions

This report provides the Board of Health with information on the cost of harmonizing the mobile dental program at the same level of service that currently exists in the South Region. It also outlines the health benefits of this program and the eligibility criteria used to ensure that only those residents who cannot afford to pay for treatment services elsewhere, receive care.

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