

Providing Timely Dental Treatment for Young Children Under General Anesthesia Is a Government Priority

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On January 11, 2007, Prime Minister Stephen Harper announced a Wait Time Guarantee pilot project for children needing surgery in Canada's pediatric hospitals.^{1,2} Six pediatric surgical areas were identified as priorities for this \$2.6-million initiative. In addition to cardiac, sight, cancer, neurology and spinal deformity surgeries, dental treatment under general anesthesia was included. This decision is remarkable and of utmost importance to the entire dental profession in Canada, as it signifies government recognition of the importance of ensuring that the dental needs of Canada's youngest citizens are met. It also signifies that oral health is part of overall child health.

Decay among the very young is called early childhood caries (ECC), defined as the presence of caries on any primary tooth in those under 72 months of age.^{3,4} Severe ECC (S-ECC) is a more rampant form that routinely requires extensive rehabilitative treatment under general anesthesia. This is not a permanent solution, as some children afflicted with S-ECC require repeat surgeries to deal with new dental disease or the failure of past dental treatment. In fact, children with ECC are at increased risk of caries throughout childhood.⁵

Pediatric dental surgery is the most common surgical daycare procedure at most

pediatric hospitals in Canada.⁶ This should not be surprising as caries is far more prevalent than many other pediatric illnesses. Unfortunately, for years, health professionals and the public have overlooked the impact of poor oral health on both children (e.g., quality of life) and service systems (e.g., pediatric health centres). In fact, more than 2,000 preschool-aged children undergo dental surgery in Manitoba hospitals annually for the treatment of ECC⁶⁻⁸ while many more receive treatment in private surgical centres. For many children, the cost of treatment goes beyond the dental treatment fee as it usually involves transportation from the north, accommodation and hospital care, including the general anesthesia fee.⁹ Clearly, ECC, a disease that is mainly preventable, is placing an unnecessary burden on the already stressed Canadian health care system.

The need to provide timely dental care for young children is paramount. The wait list for surgery is often lengthy, which leaves many preschoolers with reduced quality of life.

In Manitoba, pediatric dental surgery is provided by both pediatric and general dentists, some of whom travel to various regions of the province. Each facility providing dental surgery has a different capacity to do so, depending on the number of available clinicians, anesthesiologists and operating room time.

Different operating requirements exist in these facilities. The Winnipeg Regional Health Authority and the Burntwood Regional Health Authority require that pediatric dentists perform this surgery, whereas there is no such requirement in other regions. However, it is generally accepted that, for children under 3 years of age, anesthesia services must be provided by a pediatric anesthesiologist. Otherwise, a general anesthesiologist or general practitioner–anesthesiologist can provide the service.

Pediatric dental surgery continues to be an area of concern in Manitoba and is now a provincial priority.^{8,10} Efforts are underway to review pediatric dental surgery services with the intent of establishing a framework for improved management of the wait list within the province and for projecting future demand. Concerns about the appropriateness and necessity of treating children under general anesthesia for tooth decay, from both safety and resource utilization/efficiency perspectives have been raised. Some of the issues identified by Manitoba Health include the reality that the current wait-list process is not mandated, managed or effective at quantifying the true demand for service, the lack of provincial standards for the provision of this surgery, the absence of provincial criteria for use of operating rooms by pediatric or general dentists and the inconsistent provision of wait-list information by providers, which often conflicts with other sources. Other challenges include the high cancellation rate that results in inefficient use of hospital operating rooms and surgeries performed in Winnipeg when services might be available closer to home.

Based on the volume of pediatric dental surgery services provided in Manitoba hospitals in 2004–2005, the province spends at least \$1.08 million a year in operating and medical remuneration costs. In 2005–2006, increased funding for 2,400 pediatric dental surgeries at 3 facilities alone was estimated to have cost \$1.38 million, excluding costs associated with procedures performed in facilities using base funding. It is estimated that Manitoba Child and Family Services spends an additional \$500,000–800,000 in dental fee remuneration for children requiring general anesthesia. Federally, approximately \$3.5–4 million per annum is paid out in dental fee remuneration for Manitoba children while an additional \$2.5–3 million is paid for transportation costs associated with these surgeries.

Temporary solutions to manage the wait list in the Winnipeg region have included contracts with local surgical centres and an urgent care facility. Unfortunately, these “short-term fixes” will not eliminate the future demand for dental services under general anesthesia unless

governments and the professions support preventive strategies to curb ECC. There is an urgent need to align prevention strategies and treatment-focused programs to ensure efficient allocation of resources and program placement.

In addition to dealing with the current demands for procedures requiring general anesthesia, Manitoba Health has also invested in much-needed early childhood oral health promotion.¹¹ Healthy Smile Happy Child¹² has used past wait-list information to identify communities with high referral rates for surgery to prioritize outreach activities. Ongoing analysis using the Manitoba Health administrative database will also assist in identifying where these children reside, thereby identifying “hot-spots” of S-ECC in need of prevention.

In light of these significant issues, Manitoba Health has determined that there is a need to undertake a provincial audit of pediatric dental services and to establish a provincial wait list for pediatric dental surgery. Identifying wait-list and pre- and post-operative information requirements is also essential. Standard criteria for operating room-based treatment for young children must be developed, as well as a strategy to address and mitigate cancellations. All this could be achieved by working in partnership with pediatric dentists, child health experts, health administrators and other stakeholders.

Manitoba Health is now establishing a Wait Times Task Force Pediatric Dental Surgery Working group, which will include members from each of the relevant stakeholder groups, including pediatric dentists. This body will conduct the provincial audit, validate the wait list, develop standard criteria for access to operating rooms for pediatric dental surgery, establish implementation strategies and determine the financial and resource implications associated with implementation and ongoing management.

This announced pilot project has the potential to drastically reduce the backlog for pediatric dental surgery in Canada; yet the only true way to address the needs of this vulnerable segment of society is through improved access to early preventive care and effective and culturally appropriate strategies that promote good early childhood oral health. The dental profession must be an active participant on both these fronts. It must also advocate increased oral health promotion activities targeting at-risk populations. ♦

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