# SCIENTIFIC ARTICLES

# Canadian Dentists' Opinions on Publicly Financed Dental Care

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#### Abstract

Objective: The aim of this study was to inform policy leaders of the opinions of Canada's major dental care service provider regarding publicly financed dental care. Methods: Using provincial/territorial dental regulatory authority listings, a 26-item questionnaire was sent to a representative sample of Canadian dentists (n = 2219, response rate = 45.8 percent). Descriptive statistics were produced, and bivariate and multivariate logistic regressions were conducted to assess what predicts dentists' responses. Results: Canadian dentists support governmental involvement in dental care, preferring investments in prevention to direct delivery. The majority of dentists have less than 10 percent of their practice represented by publicly insured patients, with a small minority having greater than 50 percent. The majority would accept new publicly insured patients, preferring fee for service remuneration. Dentists generally appear dissatisfied with public forms of third-party financing. Conclusions: Dentists prefer a targeted effort at meeting public needs and are influenced in their opinions largely in relation to ideology. In order to move forward, policy leaders will need to devote some attention to the influence and complexity of public and private tensions in dentistry. At the very least, public and private practitioners must come to appreciate each other's challenges and balance public and private expectations in public programming.

Key Words: dental care delivery, survey, professional practice, access to health care, policy

#### Introduction

Surprisingly to some, dental care was never captured by Canada's much-lauded universal and publicly financed health-care system. The delivery of dental care in Canada thus largely mirrors the American approach, namely, a majority is insured through employment-based insurance, some pay out of pocket, and a small minority receives public support (1). The public share for dental care is similar (4.6 percent United States versus 5.9 percent Canada) (2), as is the jurisdictional breakdown in terms of the groups insured (e.g., the federal government finances care predominantly for indigenous groups, provincial and municipal governments for lowincome children, socialand assistance recipients). Similarly, some care is delivered directly, yet the great majority is delivered through the private sector as a form of public third-party financing. Professional relations with governments are also closely aligned, meaning that dentists and their organized representation have tended to discourage significant public involvement in service delivery and have long-term complaints regarding the nature of public financing (e.g., fees are too low, onerous adjudication and claims processing).

Over the last 5-10 years, as a result of these complaints and the increased social concern surrounding equitable access to dental care, Canadian

professional and social welfare groups have pushed dentistry onto the social agenda (3) and have succeeded in part as, across the country, governments are responding with increases in public financing (4-8). Nonetheless, in this environment of public dental health care renewal, policy leaders have yet to formulate any definitive strategy. Many issues require consideration. Should social safety nets be fortified, or should other marginalized groups become the focus of renewed investments? Should investments be made in prevention, in treatment services, or both? With long-term service provider complaints regarding public insurance, would providers be even willing to accept new publicly insured patients?

To help answer these and other questions, we have asked Canadian dentists their opinions on publicly financed dental care. This article will describe these opinions and present policy-relevant information regarding such care in Canada. Ultimately, this article aimed to inform policy leaders of the opinions of Canada's major dental care service provider and how these opinions correspond with some of the potential avenues policy leaders are currently exploring.

#### Method

Using provincial/territorial dental regulatory authority listings as sampling frames, a 26-item questionnaire was sent to a representative sample of Canadian dentists. The sample size calculation was based on Dillman (9):

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 $n = [(P)(1 - P)]/(C/Z)^2$ , where P is the proportion expected to choose one of two responses, C the assumed sampling error, and Z the zed statistic of the confidence interval. For a sample with a maximum variance and standard confidence interval of 95 percent ± 3 percent, n = [(1.96)(0.5)/ $(0.03)^2 = 1,067$ . This number was doubled; meaning, approximately 12 percent, or 2,134, out of an estimated 18.313 active Canadian dentists were contacted (10). This number was also stratified by province and territory (e.g., the province of Ontario has approximately 40 percent of Canada's dentists, so it made up 40 percent of the sample). In Canada's three territories, this resulted in a very small sample, so a survey was sent to every dentist in the jurisdiction. Of the remaining seven provincial jurisdictions, a random start, systematic sample was taken from respective sampling frames. This yielded a final sample of 2,219 Canadian dentists.

The survey instrument was created relative to an unpublished literature review on dentists' opinions of public programs in Canada and internationally, from previous analyses of interviews with Canadian dentists regarding publicly financed dental care in indigenous populations (11,12), and from the first author's participant observations as a community-based clinician and policy stakeholder. The survey instrument was translated into French, and both English and French versions were reviewed for clarity and relevance by using a purposive sample of four clinicians and one dental regulatory authority executive.

The survey asked structured questions on the governmental role in dental care (e.g., Do you think governments should have a role in dental care? What should that role be?), the structuring of publicly financed care (e.g., Who should receive public financing? What services should be publicly insured?), satisfaction with public programming (e.g., Do you often have disagreements with public plans with regard to your treatment? Are you satisfied with the level of coverage provided by your province's social-assistance dental plan?), and professional demographics (e.g., age, gender, year of graduation, percentage of practice covered by public insurance). The questionnaire also focused on the issues that have received recent attention in Canada's public dental health care policy environment (e.g., Should we fund dental schools to treat marginalized groups? Should we tax private insurance plans to finance public care?).

Three mailings of the questionnaire were sent, the first with an introductory letter and survey, and the remaining with a short reminder and survey. Reminder mailings were only sent to those who had not responded to prior mailings.

In terms of analyses, SPSS 13.0 (Chicago, IL, USA) was used to produce descriptive statistics and to conduct bivariate logistic regressions in order to preliminarily assess what predicted dentists' responses. Those variables that were significant at the P < 0.1 level were entered as blocks into multivariate logistic regressions to assess the dominant predictors for such responses. Predictor variables include professional demographics (age, gender, practitioner type, practice location, year of graduation), the self-reported percentage of a dentist's practice covered by public insurance (public), the amount of pro bono care reported (pro bono), whether a dentist was willing to accept remuneration mechanisms other than fee for service (pay), and responses from Table 1 (variable names appear in parentheses). This results in a total of 18 predictor variables and corresponds to those in Table 2. There are 10 outcome variables, as found in Tables 2 and 3. Outcomes such as satisfaction with public programming or levels of pro bono care will be considered in separate analyses. Because of space limitations, only detailed data on two outcomes are reported (Table 2), as

Table 1Dentists' Opinions on Publicly Financed Dental Care

	Pe	ercenta	ıge*
Questions	Yes	No	Don't know
Do you think governments should have a role in dental care? (role)	80.9	15.5	3.1
Do you think governments are doing all that they can to improve the oral health of Canadians? (improve)	8.0	74.0	16.6
If more public insurance became available, could your practice handle an increased patient load? (load)	66.8	19.9	12.1
Have you ever made a business decision to reduce the amount of public insurance in your office? (business)	33.8	60.3	4.8
Do think the federal government should consider tax incentives for dentists who treat socially marginalized groups? (incentives)	68.7	19.0	11.3
Do you think governments should fund dental schools to treat socially marginalized groups? (schools)	75.1	15.6	8.0
Do you think employment-based dental benefits should be taxed to finance public programming? (tax)	5.4	81.6	12.1
Do you often have disagreements with public plans? (problems)	57.3	32.9	8.1
Do you think the quality of dental care is affected if dentists are paid on a salary or other sessional basis? (quality)	59.0	22.0	18.1

\* May not equal 100 because of missing data.

			р р		•			
	Odds of willingness	to accept	t new public-insured pa	tients	Odds of thinking that	government	s should have a role in de	ntal care
	Bivariate		Multivariate		Bivariate		Multivariate	
	Odds ratio (95% CI)	Р	Odds ratio (95% CI)	Р	Odds ratio (95% CI)	Р	Odds ratio (95% CI)	Р
Age								
23-29	3.3 (1.1, 10.0)	0.034	$0.9 \ (0.4, 2.1)$	0.756	$1.8 \ (0.6, 4.9)$	0.263		
30-34	2.5 $(1.0, 6.1)$	0.049	$0.6 \ (0.2, 1.7)$	0.307	$1.0 \ (0.4, 2.3)$	0.993		
35-44	$1.5 \ (0.8, 3.1)$	0.222	0.7 (0.2,2.7)	0.568	$1.1 \ (0.5, 2.3)$	0.742		
45-54	$0.9 \ (0.5, 1.8)$	0.866	$0.7 \ (0.1, 3.9)$	0.641	$1.2 \ (0.6, 2.4)$	0.678		
55-64	$1.0 \ (0.6, 2.1)$	0.951	$0.5 \ (0.1, 3.7)$	0.488	$1.1 \ (0.5, 2.4)$	0.73		
65 or over (reference)								
Celluel								
Female	1.3 (0.9, 1.9)	0.151			1.5(1.0, 2.4)	0.049	1.5(0.8, 2.8)	0.220
Male (reference)								
Practitioner type								
Specialist	$0.6 \ (0.4, 1.0)$	0.034	0.6(0.4,0.6)	0.077	$0.8 \ (0.5, 1.4)$	0.452		
Generalist (reference)								
Practice location 1								
Rural	$0.5 \ (0.4, 0.8)$	0.002	$0.4 \ (0.2, 0.6)$	0.000	$1.4 \ (0.9, 2.3)$	0.173		
Urban (reference)								
Practice location 2								
Inner city	$1.1 \ (0.6, 2.0)$	0.722			1.3 (0.7,2.5)	0.384		
Urban (reference)								
Year of graduation (continuous)	$1.02 \ (1.01, 1.04)$	0.000	1.0(0.9, 1.1)	0.130	0.9 (0.9, 1.0)	0.884		
Public								
>75%	$1.3 \ (0.5, 3.6)$	0.535	$0.7 \ (0.2, 2.3)$	0.524	0.4 (0.2,0.9)	0.027	$0.3 \ (0.1, 1.1)$	0.061
50-75%	2.1 (0.9,5.2)	0.086	$1.4 \ (0.6, 3.8)$	0.451	$0.8 \ (0.4, 1.6)$	0.480	$0.7 \ (0.3, 2.0)$	0.547
25-50%	2.3 (1.0, 5.0)	0.038	2.3 (0.9,6.0)	0.077	1.6(0.8,3.3)	0.217	1.0(0.4, 2.9)	0.969
10-25%	$1.7 \ (1.0, 3.0)$	0.047	$1.3 \ (0.7, 2.5)$	0.429	2.2 (1.2,4.0)	0.00	2.1 (0.9,4.8)	0.088
5-10%	1.6(1.0, 2.5)	0.073	$1.3 \ (0.7, 2.3)$	0.451	3.4 (1.9,6.2)	0.000	3.1 (1.1, 4.1)	0.007
1-5%	$1.4 \ (0.9, 2.2)$	0.096	$1.1 \ (0.7, 1.9)$	0.65	$2.4 \ (1.5, 3.8)$	0.001	$2.1 \ (1.1, 4.1)$	0.021
<1% (reference)								
Pro bono								
>\$2,000	$1.6 \ (0.7, 3.5)$	0.225	$1.1 \ (0.4, 2.7)$	0.85	1.2 (0.6,2.6)	0.578	2.0 (0.7,6.1)	0.216
\$1,000-\$2,000	$1.7 \ (0.8, 3.4)$	0.169	$1.2 \ (0.5, 2.7)$	0.712	$1.8 \ (0.9, 3.6)$	0.124	0.8 (0.3,2.0)	0.584
\$500-\$1,000	$1.3 \ (0.8, 2.3)$	0.319	$1.0 \ (0.5, 2.0)$	0.973	2.2 (1.3,4.0)	0.006	2.0 (0.8,4.7)	0.114
<\$500	$1.9 \ (1.1, 3.3)$	0.028	1.6 (0.8, 3.2)	0.163	2.5(1.4, 4.3)	0.002	$1.7 \ (0.8, 3.9)$	0.185
None (reference)								

Table 2Results of Logistic Regression Analyses\*

Role								
Yes	1.3 (0.9, 1.9)	0.234						
No (reference)								
Improve								
Yes	$0.9 \ (0.5, 1.5)$	0.651			$0.2 \ (0.1, 0.4)$	0.000	$0.3 \ (0.2, 0.5)$	0
No (reference)								
Load								
Yes					$1.3 \ (0.9, 1.9)$	0.234		
No (reference)								
Business								
Yes	0.7 (0.5,0.9)	0.022	0.6(0.4,0.9)	0.017	0.6(0.4, 0.8)	0.001	0.5 (0.3,0.8)	0.009
No (reference)								
Incentives								
Yes	$1.4 \ (1.0, 2.1)$	0.062	$1.3 \ (0.8, 2.0)$	0.237	2.4 (1.6, 3.5)	0.000	$1.8 \ (1.0, 3.0)$	0.041
No (reference)								
Schools								
Yes	$0.8 \ (0.5, 1.2)$	0.252			2.0(1.3, 3.1)	0.001	1.6(0.9, 2.8)	0.106
No (reference)								
Tax								
Yes	1.9 (0.9, 4.4)	0.116			$0.8 \ (0.4, 1.6)$	0.549		
No (reference)								
Problems								
Yes	1.3 (0.9, 1.8)	0.146			$0.8 \ (0.5, 1.1)$	0.166		
No (reference)								
Quality								
Yes	$0.8 \ (0.6, 1.2)$	0.377			$0.7 \ (0.4, 1.1)$	0.112		
No (reference)								
Pay								
Yes	$1.4 \ (0.8, 2.6)$	0.270			4.3 (1.5, 11.8)	0.005	3.7 (1.0, 13.1)	0.045
No (reference)								
* Because of rounding, some	e statistically significant fir	ndings include the	number 1.0 in their conf	fidence intervals.				

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Table 3
Direction of Relationship Observed between Predictors and Policy Relevant Outcomes in Multiple
Logistic Regression Analyses

	Regular disagreements with public plans	Business decision to reduce public insurance	Willing to accept tax incentives	Willing to accept alternate remuneration	Funding dental faculties is a good idea	Governments are doing all that they can	Quality of care affected by alternate remuneration	Taxing private plans is a good idea
Rural		_						
Public	$+^*$	_		+*	_*		_	
Pro bono	+		+			_		
Role			+		+	_		
Business	+							
Incentives					+	_		
Schools			+					
Tax				+				
Problems		+					+	
Quality	+			_		+		
Pay							-	+

\* Denotes a very particular relationship, see Results section.

are only general data for the remaining outcomes (Table 3).

Importantly, these outcomes are chosen as they are considered to be policy relevant. In one sense, policy is a deliberate plan of action aimed at achieving particular goals that are seen as more rational than others (13). Whether through legislation or unspoken local custom, policy organizes the substantive work and roles of those to which the policy applies. In the context of publicly financed dental care, this means providers, patients, and the numerous institutional stakeholders involved in the public dental care environment (i.e., governments, professional groups, community groups, service-delivery organizations). In this way, a dentist's willingness to accept new publicly insured patients, to think that governments should have a role in dental care, to accept alternate forms of remuneration, etc., has a bearing on any "deliberate plan of action" aimed at achieving Canadian stakeholders' numerous policy goals (e.g., improved access to dental care, improved rationing processes, improved professional relations). Simply put, the opinions of the major service-delivery agent in publicly financed dental care in Canada matter to any effort at productive change. At the very least, nationally representative data on dentists' opinions provide information where there was none and allow policy leaders a unique opportunity to gauge the acceptability of their informal proposals.

#### Results

A total of 1,016 dentists answered the survey, yielding a response rate of 45.8 percent. Where possible, the survey respondents' demographics were compared with available census data on Canadian dentists (Table 4). It appears that the majority of Canadian dentists are general practitioners, between the ages of 35 and 54, graduated from dental school before 1990, and practice in urban settings. The professional gender ratio is approximately three to one.

Close to 70 percent of all Canadian dentists have less than 10 percent of their practice covered by public insurance, whereas only a small minority, 7.6 percent, have a majority of their practice publicly insured (Figure 1). Practice location is important in this regard; proportionally, rural practices represent the majority of practices with public insurance rates of 5-50 percent, whereas inner city practices represent those of 50 percent or more.

In terms of opinions on public care, 80.9 percent of dentists believe

that governments should have a role in dental care (Table 1). When asked what that role should be, on average, dentists recognize community water fluoridation first, direct preventive programs second, population health level education third, more funding for public insurance fourth, and direct treatment programs last (Table 5). A majority, 74 percent, also believe that governments are not doing all that they can to improve health of the oral Canadians (Table 1).

When asked who should be publicly insured, on average, dentists indicated that four groups should be covered, most frequently noting persons with physical and mental disabilities, persons on social assistance, persons in long-term care, and the homeless (Table 5). In terms of what services should be covered, on average, dentists indicated six services, most frequently noting checkups, cleanings, fillings, extractions, dentures, and root canals (Table 5). Canadian dentists also favor co-pays for those that access public insurance, but only for certain treatments (Table 5).

Dentists were asked if their practice could handle an increased patient load if more public financing became available; 66.8 percent said "yes" (Table 1). The vast

Table 4Sample Description by Province, Age, Gender, Type of Practice,<br/>Practice Location, and Year of Graduation

		Sample	C	Census*
	n	Percentage	n	Percentage
Province ( $\chi^2$ , <i>P</i> < 0.001)				
British Columbia	158	15.6	2807	15.3
Alberta	82	8.1	1788	9.8
Saskatchewan	28	2.8	376	2.1
Manitoba	40	3.9	579	3.2
Ontario	416	40.9	7744	42.3
Québec	174	17.1	3920	21.4
New Brunswick	33	3.2	280	1.5
Nova Scotia	26	2.6	499	2.7
Prince Edward Island	27	2.7	65	0.4
Newfoundland and Labrador	15	1.5	173	0.9
The Territories	17	1.7	82	0.3
Missing data	0	0	0	0
Age†		,		
23-29	66	6.5	955	5.0
30-34	97	9.5	1740	9.1
35-44	275	27.1	3152	16.5
45-54	303	29.8	2939	15.4
55-64	197	19.4	2934	15.3
>65	63	6.2	1172	6.1
Missing data	15	1.5	6230	32.6
Gender ( $\chi^2$ , <i>P</i> > 0.05)				
Male	742	73.0	13368	73.0
Female	262	25.8	4945	27.0
Missing data	12	1.2	0	0
Practitioner type ( $\chi^2$ , <i>P</i> < 0.003)				
Generalist	876	86.2	16409	89.6
Specialist	133	13.1	1904	10.4
Missing data	7	0.7	0	0
Practice location				
Urban	748	73.6		+
Inner city	92	9.1		
Rural	167	16.4		
Missing data	9	0.9		
Year of graduation <sup>†</sup>				
<1970	102	10.0	3560	18.6
1971-1980	245	24.1	4344	22.7
1981-1990	286	28.1	3933	20.6
1991-2000	239	23.5	2934	15.3
2001-2006	124	12.2	1507	7.9
Missing data	20	2.0	2844	14.9

\* Census data for province and practitioner type taken from Canadian Institute for Health Information. Health personnel trends in Canada. Toronto: CIHI; 2006. Data for age, gender, and year of graduation provided by the Canadian Dental Association and represents 2008 figures. † Because of the large amount of missing census data, no comparison was made.

‡ No census data available.

majority of dentists, 90.2 percent, would also prefer fee for service remuneration above salary arrangements (1.4 percent), capitation (0.5 percent), or a combination of the former (6.8 percent). In fact, close to 60 percent of dentists believe that the quality of dental care is affected if a practitioner is paid on a salary or sessional basis (Table 1).

When asked to estimate how much pro bono work they provide in 1 month, 8.1 percent of dentists reported providing none, 72.8 percent less than \$1,000, and 16.7 percent more than \$1,000. In this regard, Canadian policy leaders have suggested tax incentives for such pro bono work or for those dentists that treat socially marginalized groups, and 68.7 percent of dentists think this is a good idea (Table 1). As currently occurs in the province of Québec (which does not exempt employment-based health insurance from provincial taxation) (14), dentists were asked if private insurance plans should be taxed in order to finance public programming. A great majority, 81.6 percent, said "no" (Table 1). The involvement of dental schools and their staff in treating socially marginalized groups has also gained prominence in Canadian policy discussions. When asked if dental schools should receive government funding for such purposes, 75.1 percent of dentists said "yes" (Table 1).

Canadian dentists were also asked if they had ever made a "business decision" to reduce the amount of public insurance in their practice, and a third have made this decision (Table 1). In turn, dentists' experiences with public programming were explored. For example, when asked if they "often have disagreements with public plans," 57.3 percent of dentists said "yes" (Table 1). When asked what specifically bothers them about publicly financed care, on average, dentists noted five things, indicating most frequently the limited services covered, low fees, broken appointments, slow payment, and denial of payment (Table 5). Overall, dentists appear dissatisfied with public forms of third-party financing (Table 6).

Detailed results of multivariate analyses are presented in Table 2. The first outcome described is the odds that a dentist is willing to accept new publicly insured patients. Bivariately, this willingness is characterized by a number of relationships. For example, compared with the



oldest dentists, the youngest were more likely to accept new publicly insured patients. Specialists were less likely to accept new patients, as were those in rural practice and those who had made a "business decision" to reduce the amount of public insurance in their practice. Year of graduation had a marginal positive effect, as did the amount of public insurance in a practice, the level of pro bono work reported, and the belief that tax incentives for treating marginalized groups were a good idea. Multivariately, relationships hold only for those in rural practice and for those who have made a "business decision," both being less likely to accept new publicly insured patients.

Table 2 also details the odds of believing that governments should have a role in dental care. Bivariately, female dentists are more likely to have such a belief, as are those with marginally increasing levels of public insurance. The relationship does not hold for those with public insurance rates of 25 percent or more and actually reverses for those with the greatest levels of public insurance. Levels of *pro bono* care also had a marginal effect, while wanting tax incentives to treat marginalized groups, thinking dental schools should be funded to treat marginalized groups, and the willingness to accept alternate forms of remuneration all defined a greater likelihood of believing that governments should be involved in dental care. Those who believed that governments are doing all that they can to improve the oral health of Canadians and those who had made a "business decision" were less likely to perceive a governmental role. Multivariately, relationships hold for all variables other than gender, pro bono care, and the idea of funding dental schools.

In lieu of space limitations, Table 3 considers other outcomes generally, only noting the direction of relationship observed in multivariate analyses. First, expected relationships are present. For example, the more *pro bono* care a dentist reported, the greater the likelihood of reporting disagreements with public plans and of a willingness to accept tax incentives, and the lesser the likelihood of agreeing that governments are already doing all that they can to improve the oral health of Canadians. Those who perceived a governmental role in dental care were also less likely to agree that governments are doing all that they can, and were more likely to accept alternate forms of remuneration and to think that funding dental schools to treat socially marginalized groups is a good idea. Second, the amount of public insurance in a practice demonstrated interesting impacts. For example, only those dentists with 1 to 5 percent public insurance reported a greater likelihood of disagreements with public plans; all others did not. As well, only those dentists with 25-50 percent public insurance reported a greater likelihood of accepting alternate forms of remuneration, and only those with 5-25 percent reported a lesser likelihood of thinking that the funding of dental schools is a good idea. Finally, it is worthy to note that, in all multivariate analyses, age, gender, practitioner type, and year of graduation did not predict opinions on publicly financed dental care.

## Discussion

These data suggest that Canadian dentists want governments involved in dental care and that they favor a targeted and preventive approach to meeting public need as opposed to a universal and direct delivery approach. They suggest that dentists are willing to treat publicly insured patients but that they remain dissatisfied with the public rationing of dental care. They also suggest that relatively few dentists actually deal with public insurance in any significant regard. Overall, these descriptions compare well with historical and current evidence on dentists' opinions in Canada and the United States (15-21).

This survey also describes an aging and more gender-equivalent professional population, an issue that has been flagged for consideration in Canada's dental human resources planning (22). Policy leaders have suggested a potential shortfall in available human resources as a result of these two factors, conceivably

Table 5Multiple Response Data on Dentists' Opinions of Publicly Financed<br/>Dental Care

Questions	Percentage of cases
What should that role be?	
Community water fluoridation	88.1
Population-level health education	76.1
Direct preventive programs	82.5
Direct treatment programs	46.0
More funding for public insurance	56.8
Total	349.6
Who should be publicly insured?	0
Evervone	14.7
Anyone without private insurance	15.3
All children	38.4
Only children of the poor	40.9
Persons on social assistance	60.5
Persons with physical and mental disabilities	68.9
Persons with aboriginal status	19.9
Persons over 65	31.8
Persons in long-term care	52.7
The homeless	43.8
Total	387.0
What services should be publicly insured?	
Checkups	97.0
Cleanings	93.9
Fillings	94.3
Dentures	73.7
Extractions	96.0
Root canals	62.7
Periodontal surgery	24.8
Crown and bridge	14.6
Orthodontics	6.8
Cosmetic	2.5
Total	566.3
Should there be a co-pay?	
Yes, they should be expected to pay in all instances.	29.5
Yes, they should be expected to pay when costs exceed a certain amount.	29.5
Yes, they should be expected to pay only for certain treatments.	44.0
No, the patient should not be expected to pay.	14.7
Total	117.7
What bothers you about publicly financed dental care?	
Broken appointments	59.6
Low fees	69.5
Patient non-compliance	45.7
Denial of payment	52.3
Slow payment	55.6
Complicated paperwork	53.0
Public management	22.5
Too stringent adjudication of claims	33.8
Frequently changing regulations	33.8
Limited services covered	76.2
Total	502.0

exacerbating current disparities in access to care.

These data also confirm that some of the proposals receiving attention

from policy leaders are both consistent and inconsistent with dentists' opinions. For example, the idea of tax incentives for *pro bono* care and

Dentists' Satisfaction with the Level of Coverage, Fees, and Administration and Management of Provincial and Federal Programming Table 6

					Percentage*				
		Level of covera	ıge		Fees		Admini	stration and ma	nagement
	Satisfied	Unsatisfied	Don't know	Satisfied	Unsatisfied	Don't know	Satisfied	Unsatisfied	Don't know
Provincial social-assistance programming	23.7	55.0	19.9	12.9	66.0	19.8	28.7	42.4	27.6
Provincial children's programming	35.2	49.5	13.9	41.9	64.3	15.9	38.2	38.1	22.7
Federal programming	24.3	42.7	31.4	19.9	46.8	32.0	16.5	46.6	34.8
* May not equal 100 because of missing data.									

for treating marginalized groups has some traction, as do co-pays and the funding of dental schools to treat socially marginalized groups. Yet the ideas of taxing private plans to finance public care and of exploring alternate forms of remuneration are clearly antithetical to professional sentiment.

This points to an important aspect of dentists' opinions, namely, their marked consistency and polarization. While age, gender, year of graduation, practitioner type, and practitioner location do not play a major role in predicting dentists' opinions, variables that reflect ideological inclinations, such as public insurance rates and not observing a governmental role in dental care, certainly do. To be sure, the only predictor of the idea of taxing private plans in order to finance public care, a very unpopular idea, was the willingness to accept alternate forms of remuneration, another very unpopular idea.

It can be argued that this does not tell us anything that surprising about dentists' opinions, as it simply points to the well-known gulf between public and private orientations within the dental profession (23-26). Yet upon closer inspection, this gulf arguably represents one of the greatest barriers to any productive change in this time of public dental healthcare renewal. Truly, these data help us deduce that, historically, things have not changed and that the public-private debate is still generative when addressing the many issues surrounding publicly financed dental care. They help us deduce that the main service provider in Canada's dental care system is effectively at odds with any major changes to the current structure of delivering publicly financed dental care, in spite of the long-term problems and dissatisfaction with public care and in spite of the predominantly minor role that public care plays in most dentists' practice careers. It should indeed surprise that 5.6 percent of all dental care expenditures in Canada attract so much attention, yet it should not surprise that they do so exactly because of ideology.

In this regard, over the short term, the question of oral health disparity presents challenges exactly because of issues rooted in ideology. For instance, with public remuneration mechanisms that are unpopular with dentists and with utilization rates in public programming of approximately 30-40 percent (27), some suggest that it behooves policy leaders to consider other servicedelivery options. Numerous groups have consistently pointed to the need for a renewed focus on community-based infrastructure, especially in relation to severely marginalized groups (3). So with known gender differences in terms of practice careers (28) and opinions on public care and with the apparent polarization of opinions among Canadian dentists, could particular demographics within the profession act as a resource for any renewed public infrastructure?

Over the long term, policy leaders will also have to consider more complex issues, issues that are often underdetermined in our social discussions on dentistry and ones that are also rooted in ideology. For instance, while policy stakeholders readily recognize inequity, they remain unclear as to what exactly is equitable in terms of access to dental care. Out of the varied services that the profession would like covered, for instance, what can reasonably constitute a public good? Should the state routinely finance services when there is no evidence of therapeutic benefit (e.g., prophylactic removal of third molars) or where there is substantial evidence on poor prognoses and outcomes (e.g., posterior composite resins in high-disease environments)? For that matter, what is equity for disease processes that are broadly situated in both individual responsibility, and in the responsibility of meeting the needs of the most vulnerable? Should the state finance complex care for those who have demonstrated a history of poor oral self-care, for instance? One need only consider the billions spent on cardiac care every year to see how complex these issues may actually be (i.e., significant expenditures constituted by largely preventable conditions that similarly link to routine health behaviors).

Ultimately, it can be argued that, from a policy point of view, the gulf between public and private orientations in dentistry potentially represents the most substantial barrier to fully identifying relevant problems and to formulating clear responses to them. As a result, it is a forthright approach to these difficult questions that will allow us to substantively attend to disparities in access and care. At the very least, it is arguable that any movement forward in Canada's public dental health-care renewal will require public and private practitioners to appreciate each other's challenges and to be cognizant of the necessary balance between public and private expectations in public programming.

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#### References

- Statistics Canada, Centers for Disease Control. Joint Canada/United States survey of health. Ottawa: Statistics Canada, Health Analysis and Measurements Group; 2003.
- Parkin D, Devlin N. Measuring efficiency in dental care. In: Scott A, Maynard A, Elliott R, editors. Advances in health economics. London: John Wiley & Sons Ltd; 2003. p. 143-66.
- Armstrong R. Access and care: towards a national oral health strategy – Report of the symposium. J Can Dent Assoc. 2005;71:19-22.
- Government of British Columbia. Enhanced dental program benefits British Columbians. News Release. Vancouver: Ministry of Health Services, Ministry of Human Resources; 2005 [accessed 2008

Oct 15]. Available from: http://www2. news.gov.bc.ca/nrm\_news\_releases/ 2005HSER0027-000290.htm

- Government of Manitoba. Health Minister announces new initiatives to reduce tooth decay, lower pediatric dental wait times. News Release. Winnipeg: Manitoba Health; 2005 [accessed 2008 Oct 15]. Available from: http://www.gov.mb.ca/chc/press/top/2005/11/2005-11-10-02. html
- Government of Alberta. Enhanced benefits for seniors announced. News Release. Edmonton: Government of Alberta; 2004 [accessed 2008 Oct 15]. Available from: http://www.gov.ab.ca/ acn/200408/1691214888E74-8CDC4F8B-A67FA592A32300BB.html
- Government of Newfoundland and Labrador. Government announces improvements to children's dental program. News Release. St. John's: Health and Community Services; 2006 [accessed 2008 Oct 15]. Available from: http:// www.releases.gov.nl.ca/releases/2006/ health/0823n01.htm
- Ontario Liberal Party of Canada. The Ontario Liberal Plan, 2007 costing summary. Toronto: Speech from the Throne, Government of Ontario; 2007 [accessed 2008 Oct 15]. Available from: http://www.ontarioliberal.ca/upload/dir/ CostingMovingForwardTogetherEnglish. pdf
- Dillman D. Mail and internet surveys: the tailored design method. New York: John Wiley Company; 2000.
- Canadian Institute for Health Information. Health personnel trends in Canada. Toronto: Canadian Institute for Health Information; 2006.

- Quiñonez C. A political economy of dentistry in Nunavut. Int J Circumpolar Health. 2004;63 Suppl 2:324-39.
- Quiñonez C. Dentistry in Nunavut: Inuit self-determination and the politics of health. In: Oakes J, Riewe R, Wilde K, Edmunds A, Dubois A, editors. Native voices in research. Winnipeg: Aboriginal Issues Press; 2003. p. 21-33.
- Dobuzinskis L, Howlett M, Laycock D. Policy analysis in Canada: the state of the art. Toronto: University of Toronto Press; 2007.
- 14. Stabile M. Private insurance subsidies and public health care markets: evidence from Canada. Can J Econ. 2001;34:921-42.
- Government of Canada. What is the nature of dental public health – its objective? Ottawa: Department of National Health and Welfare: Government of Canada; 1966.
- 16. Government of Canada. A survey of dental public health within the dental profession and within public health agencies including those of government. Ottawa: Department of National Health and Welfare: Government of Canada; 1967.
- Government of Canada. A survey of opinions on public dental programs (nature, relationships and outlook). Ottawa: Department of National Health and Welfare: Government of Canada; 1969.
- Jong A, Gluck G. How dentists view Medicaid in Massachusetts. N Y State Dent J. 1972;38:546-8.
- Abrams R, Petterson M. Attitudes toward national health insurance: dentists, dental students, and dental hygiene students. Community Dent Oral Epidemiol. 1980;8: 132-4.

- Bauman GH. The financing and delivery of dental care: a nation-wide survey of dentists. J Am Dent Assoc. 1996;127: 1108-13.
- Canadian Dental Association. Survey of Canadian dentists on pro bono and other community-based volunteer activities. Ottawa: Canadian Dental Association; 2007.
- 22. Brown T, Raborn W. Is there an adequate supply of new dentists in Canada? J Can Dent Assoc. 2001;67:373-4.
- Davis P. Introduction to the sociology of dentistry: a comparative approach. Dunedin: University of Otago Press; 1987.
- Nettleton S. Power, pain & dentistry. Buckingham: Open University Press; 1992.
- Nash D. A tension between two cultures

   dentistry as a profession and dentistry
   as proprietary. J Dent Educ. 1994;58:
   301-6.
- Taylor-Gooby P, Calnan M. Knights, knaves and gnashers: professional values and private dentistry. J Soc Policy. 2000;29:375-95.
- Quiñonez C. An environmental scan of provincial and territorial public dental care programming. Ottawa: Office of the Chief Dental Officer, Health Canada; 2008.
- McCarthy GM, MacDonald JK. Sociodemographic and workload characteristics of dentists who participated in national survey, 1995. J Can Dent Assoc. 2000;66: 144-6.

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