In the Eyes of the Beholder: Population Perspectives on Performance Priorities for Primary Care in Canada

Le regard de l'autre : point de vue de la population sur les priorités en matière de rendement dans les soins primaires au Canada

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Abstract

The purposes of this study were to identify the Canadian population's performance priorities for primary care, to ascertain the stability of these priorities over time and to examine variation across priorities among different subgroups of the population. The authors administered a survey of 10 priorities (determined through earlier work) to over 1,000 Canadians in 2001, and again in 2004. Analysis of variance was used to compare the ratings of each priority across the two years. The authors completed a forward stepwise regression analysis to examine the relationships between performance priorities and population characteristics in each year.

The overall order of importance ascribed to the 10 performance priorities is sustained from 2001 to 2004, as is the significance and directionality of several relationships between performance priorities and population subgroups distinguished by sex, age, education, income and province. Respondents generally think that the evaluation of primary care services should be predicated on assessments of physicians' technical skill along with their communication skills, but place less emphasis on practice management aspects of primary care.

The findings offer a basis for a meaningful, feasible, national public performance reporting strategy for primary healthcare (reform), where measures reflect the 10 performance priorities highly valued by the Canadian population.

Résumé

L'objet de cette étude était de déterminer, du point de vue de la population canadienne, les priorités en matière de rendement dans les soins primaires, de vérifier la stabilité de ces priorités au fil du temps et d'étudier leurs variations en fonction de différents sous-groupes de la population. Les auteurs ont effectué un sondage au sujet de 10 priorités (établies au cours de travaux antérieurs) auprès d'un échantillon de 1 000 Canadiens en 2001 et en 2004. L'analyse de la variance a servi à comparer le classement de chacune des priorités au cours des deux années. Pour chacune des années, les auteurs ont employé la régression multiple ascendante pour analyser la relation entre les priorités en matière de rendement et les caractéristiques de la population.

En général, l'ordre d'importance attribuée aux 10 priorités se maintient entre 2001 et 2004, de même que la signification et le lien directionnel dans plusieurs relations entre les priorités et les sous-groupes populationnels déterminés selon le genre, l'âge, la scolarisation, le revenu et la province. En général, les répondants considèrent que l'évaluation des services de première ligne devrait tenir compte des compétences techniques et communicationnelles des médecins, mais ils accordent moins d'importance aux aspects concernant la gestion de la pratique des soins primaires.

Les conclusions jettent les bases d'une stratégie nationale de divulgation publique du rendement des soins primaires (réforme), dans laquelle les mesures reflètent les 10 priorités jugées importantes par la population canadienne.

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Following the release of the Romanow and Kirby reports on healthcare (Romanow 2002; Kirby 2002), First Ministers across Canada committed to public reporting on the investments made in primary healthcare reform (e.g., 2003's First Ministers' Accord on the Future of Health Care; 2004's First Ministers' Meeting on the Future of Health Care). Consequently, a number of government-funded entities have developed primary care performance indicators. For example, the Canadian Institute for Health Information developed over 100 indicators, 85 of which were organized under seven objectives for primary care performance (CIHI 2006).

While there is an abundance of indicators upon which to predicate a measurement strategy for primary healthcare reform, there is a dearth of "measurement capacity" or resources available with the expertise to execute such a strategy. Nor, to date, has there emerged any clear mechanism by which to prioritize indicators and so facilitate an effort to develop a more parsimonious indicator set that can be used to inform the public of progress – and the policy makers of wise future investments in reform.

Our study complements those that have led to the generation of indicators. Here, we aim to establish which primary care *performance priorities* are valued by the public, to assess the stability of these priorities over time and to reveal variation across the priorities among different subgroups of the population. Performance priorities are "statements that indicate the importance of specific aspects of the clinical behaviour of care providers or the organization of care" (Wensing et al. 1998). Performance priorities are similar, conceptually, to values (Ross et al. 1993), preferences (Ross et al. 1993; Nathorst-Boos et al. 2001) and importance ratings (Ross et al. 1993; Nathorst-Boos et al. 2001). All these concepts have their origins in the field of marketing, where researchers have endeavoured to understand the antecedents of customer/consumer choice and to position alternative products or services based on distinguishable consumer characteristics or target markets (Lovelock 1991). The primary care performance priorities we identify here can inform efforts to prioritize among performance indicators, and therefore offers the basis for a meaningful, feasible, national public performance reporting strategy for primary healthcare reform.

In addition to identifying the primary care performance priorities valued by Canadians, we sought to understand some of the bases for their valuation. Differences in patient characteristics, such as the type and severity of illness, socio-economic status, culture, ethnicity and literacy have been found to influence patient satisfaction

levels (Draper and Hill 1996; Entwisle et al. 1996). We expected that the Canadians would be similarly varied in their ratings of performance priorities for primary care. Therefore we examined the relationships between several population characteristics and ratings of primary care performance priorities.

Our study addressed three objectives:

1. To determine which of 10 performance priorities are considered by the general population to be of particular importance in the evaluation of primary care performance;
2. To ascertain the stability of these priorities by examining whether the relative importance of the 10 performance priorities changed between 2001 and 2004; and
3. To determine whether priority ratings vary according to identifiable population subgroups.

Methods

We report on findings from a telephone survey administered to samples of the general Canadian population in 2001 and again in 2004. Survey respondents were asked to rate each of 10 performance priorities on their importance for evaluating primary care services where the priorities would hypothetically serve as the bases for public performance reporting.

Identification of performance priorities

The 10 primary care performance priorities we examined were established as part of a study completed by Murray and colleagues (2000). These researchers conducted a literature review of studies on healthcare performance from the perspectives of both consumers and potential consumers of healthcare. Based on this review, the team identified the information needed to evaluate, monitor and improve primary care performance from a population perspective. Performance priorities were then identified through 20 focus groups conducted across Canada between June and July 1999. Two focus groups were completed in each of the following cities: St. John, New Brunswick; Halifax, Nova Scotia; Montreal, Quebec; Trois-Rivières, Quebec; Peterborough, Ontario; Saskatoon, Saskatchewan; Calgary, Alberta; and Vancouver, British Columbia. Four focus groups were conducted in Toronto, Ontario. Participants were selectively recruited from a listing of volunteers maintained by a social marketing firm, and represented variation in the following characteristics specified by the researchers: age, gender, experience with the healthcare system, urban or rural location, type of employment, health status, ethnicity and time in Canada. The focus groups opened

with general discussion of the healthcare system followed by the value of public report cards and the preferred content of the report cards. The top 10 priorities for primary care performance identified in the focus groups and from the literature were included in both the 2001 and 2004 surveys. A follow-up review of the literature, completed in 2003 in preparation for the 2004 survey, confirmed that the performance priorities used in the 2001 survey remained pertinent.

Survey development and administration

IBM Business Consulting Services prepared and pre-tested the telephone survey in consultation with the research team (a copy of the telephone survey is available from the corresponding author upon request). Our telephone survey was incorporated into the HealthInsider survey administered to Canadian consumers through the IBM Business Consulting Services' National Survey Centre in Ottawa.[1] A scale from 10 (of critical importance) to 0 (not at all important) was used in the survey. The survey was administered by trained professional telephone interviewers in February 2001 and again in October 2004. Respondents were interviewed in their official language of choice.

Sample selection and weighting

The sample for HealthInsider was generated using a stratified two-stage random sampling technique. Each of the 10 provinces in Canada was allocated a quota that was treated independently in the sampling process of the survey. The provincial quota was then distributed among five community-size strata according to their contributions to the provincial population. In addition, separate strata were created for Montreal, Toronto and Vancouver. As a result, Quebec, Ontario and British Columbia had a total of six strata.

Data were weighted and verified against 2001 and 2004 Statistics Canada census information at the provincial and national levels.

Population characteristics

Based on the work of others (Wensing et al. 1998; Williams and Calnan 1991), we included the following population characteristics in our surveys: sex, age (15–24 years, 25–44 years, 45–64 years and 65 and older), marital status (partner vs. no partner), level of education (less than secondary education, secondary education, post-secondary education), work status (working vs. non-working), level of income (less than $20,000 per year, $20,000–$49,999 and $50,000 per year and over) and province.

Analysis

We completed chi-square tests to determine whether there were significant differences in respondent characteristics between the two observation years. We used weighted analysis of covariance to compare the ratings of each priority across the two years, and forward entry (stepwise) regression analysis to examine relationships between the primary care performance priorities (modelled separately as dependent variables) and population characteristics (independent variables) for each observation year.

Results

The results are based on a probability sample of 1,162 and 1,099 Canadians 15 years of age and older in 2001 and 2004, respectively. For both years, we excluded records with missing data; in 2001, this led to the exclusion of 156 cases and in 2004, 148 cases. Comparable to other studies that used telephone-administered surveys (e.g., Tortora 2004, Alberta Survey 2005), the completion rates for our survey were 36.2% in 2001 and 22% in 2004. While the population demographics of respondents were relatively stable across the two observation years, we note that the sample is somewhat biased, as respondents over both years are highly educated relative to national levels reported in the Canadian census. The 2001 Census reports the Canadian population 15 years and over as comprising 33% individuals with less than secondary education, 23% individuals with secondary education and 44% with post-secondary education; our respondents are under-representative of the population having less than secondary education, and over-representative of the other two categories (see Table 1).

TABLE 1. Respondent characteristics

	2001 (%)	2004 (%)	P value (χ^2 statistic)
	N=1,318	N=1,247	
Sex			**0.659**
Male	42.0	41.1	
Female	58.0	58.9	
Age			**0.235**
24 and under	14.2	12.8	
25–44	37.1	37.0	
45–64	32.4	35.7	
65 and over	16.3	14.5	

Table 1. Continued

Marital status			0.179
Partner	50.2	52.9	
No partner	49.8	47.1	
Education			**<0.001**
Less than secondary	6.3	4.0	
Secondary	45.7	38.4	
Post-secondary	48.1	57.6	
Working status			**0.903**
Working	60.7	60.4	
Not working	39.3	39.6	
Income			**<0.001**
Less than $20,000	25.2	18.6	
$20,000 to $49,999	42.2	41.3	
$50,000 and over	32.6	40.1	
Province			**0.465**
British Colombia	12.7	12.3	
Alberta	12.2	13.5	
Saskatchewan	13.5	11.5	
Manitoba	13.0	12.5	
Ontario	11.6	13.8	
Quebec	12.7	13.1	
Atlantic*	24.2	23.3	

* Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick.

Table 2 shows that the orders of importance ascribed to primary care priorities in 2001 and 2004 were identical. In both years, the extent to which physicians keep their knowledge and skills up to date (PC1), the physician's diagnostic and treatment skills (PC2) and his or her ability to explain things in a way that the patient can understand (PC3) received the highest scores across all 10 variables – first, second and third, respectively. Also in both years, reminder of upcoming visit (PC9) and waiting time to appointment (PC10) were rated as the lowest of the 10 primary care performance priorities, and were the only two priorities with a mean less than 7 (in our survey, 5 = *neither important nor unimportant* and 10 = *of critical importance*) and a median less than 8. While the order of importance did not change from one observation year to the next, a weighted analysis of covariance identified four priorities with significant (p<0.001) mean differences in their ratings between 2001 and 2004. Ratings of the importance of the family physician keeping his or her knowl-

edge and skills up to date (PC1) and the physician's skill in identifying and treating patient's problems (PC2) decreased, while ratings of whether the physician (or his or her staff) contacts patients to remind them when it is time for a check-up, test or immunization (PC9) and the waiting time for an appointment with a physician for a non-urgent problem (PC10) increased.

TABLE 2. Comparison of 2001 and 2004 primary care performance priorities

Performance priority	2004			2001		
	Order of importance	Mean	SD	Order of importance	Mean	SD
The extent to which the family physician (FP) keeps his/her knowledge and skills up to date (PC1)	1	9.17↓	1.51	1	9.29	1.49
The FP's skill in identifying and treating patient's problems (PC2)	2	9.02↓	1.60	2	9.17	1.54
Ability of the FP to explain things in a way that the patient can understand (PC3)	3	8.99	1.62	3	8.91	1.74
Whether the FP makes referral to specialists or other healthcare providers when needed (PC4)	4	8.97	1.63	4	8.87	1.59
Patient satisfaction with care (PC5)	5	8.65	1.74	5	8.75	1.70
Extent to which the FP is sensitive and caring (PC6)	6	8.42	1.90	6	8.47	1.92
Whether the FP spends adequate time with a patient (PC7)	7	8.31	2.02	7	8.34	2.04
Whether the FP or a colleague can be contacted for urgent problems after the office is closed (PC8)	8	7.71	2.50	8	7.96	2.25
Whether the FP or his/her staff contacts patients to remind them when it is time for a check-up, test or immunization (PC9)	9	6.98↑	2.65	9	6.80	2.59
Waiting time for an appointment with the FP for a non-urgent problem (PC10)	10	6.11↑	2.71	10	5.64	2.74

Note 1: 10 = critical importance; 0 = not at all important.
Note 2: ↑ and ↓ indicate significant increase or decrease in ratings from 2001 to 2004, respectively.

Table 3 summarizes the stepwise regression analysis; only variables with significant coefficients are shown in the table. While there are a few instances between 2001 and 2004 where population characteristics shifted from significance to non-significance and vice versa (e.g., age and marital status), there are a number of performance priority scores that are consistently explained by particular population characteristics that we

TABLE 3. Primary Care Performance Priorities Parameter Estimates (SE)

Population	PC 1		PC 2		PC 3		PC 4	
Characteristic	2001	2004	2001	2004	2001	2004	2001	2004
Intercept	9.251	9.032	9.220	8.475	8.640	8.705	9.141	8.693
	(0.121)	(0.268)	(0.132)	(0.304)	(0.688)	(0.068)	(0.149)	(0.069)
Age								
15 to 24				0.571			-0.455	
				(0.175)			(0.159)	
25 to 44				0.010			-0.201	
				(0.146)			(0.153)	
45 to 64				0.146			0.017	
				(0.151)			(0.164)	
65 and over				0.000			0.000	
Marital Status								
No Partner							-0.350	
							(0.101)	
Partner							0.000	
Sex								
Female	0.319	0.496	0.307	0.493	0.558	0.505	0.341	0.502
	(0.084)	(0.089)	(0.088)	(0.095)	(0.098)	(0.096)	(0.090)	(0.097)
Male	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Income								
Less than $20,000								
$20,000 to 49,999								
$50,000 and over								
Education								
Less than Secondary			-0.961					
			(0.217)					
Secondary			0.000					
Post-Secondary			0.139					
			(0.090)					
Province								
Alberta	-0.068	-0.154	-0.241	-0.100				
	(0.167)	(0.303)	(0.175)	(0.320)				
Atlantic	-0.207	-0.052	-0.385	0.136				
	(0.142)	(0.313)	(0.148)	(0.331)				
British Colombia	0.175	-0.023	-0.0743	0.124				
	(0.165)	(0.291)	(0.172)	(0.308)				
Manitoba	-0.208	-0.098	-0.224	0.186				
	(0.163)	(0.356)	(0.170)	(0.376)				
Ontario	0.126	0.123	0.169	0.403				
	(0.165)	(0.274)	(0.171)	(0.289)				
Quebec	-0.439	-0.621	-0.557	-0.191				
	(0.167)	(0.279)	(0.166)	(0.295)				
Saskatchewan	0.000	0.000	0.000	0.000				

⟶ Table continues on next page horizontally.

NOTES: (1) A Bonferroni correction for multiple comparisons was used here; this Table includes only those variables significant at p<0.005.
(2) While included in our original models, we exclude Working Status in these final models as this characteristic never achieves significance.

PC 5		PC 6		PC 7		PC 8		PC 9		PC 10	
2001	2004	2001	2004	2001	2004	2001	2004	2001	2004	2001	2004
8.546	8.361	8.133	8.259	8.563	8.070	7.698	7.398	7.328	7.760	5.620	6.186
(0.069)	(0.114)	(0.173)	(0.109)	(0.227)	(0.349)	(0.094)	(0.167)	(0.156)	(0.199)	(0.080)	(0.135)
		-0.263		-0.611							
		(0.191)		(0.195)							
		-0.022		-0.154							
		(0.189)		(0.193)							
		0.469		-0.233							
		(0.201)		(0.207)							
		0.000		0.000							
	0.284						0.506				
	(0.100)						(0.146)				
	0.000						0.000				
0.440	0.556	0.619	0.597	0.571	0.563	0.472	0.732				
(0.098)	(0.099)	(0.111)	(0.111)	(0.115)	(0.117)	(0.132)	(0.144)				
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
								0.000	0.000		
								-0.392	-0.179		
								(0.184)	(0.224)		
								-0.963	-0.884		
								(0.203)	(0.223)		
	0.554		0.873				0.684	1.115	1.557		1.468
	(0.267)		(0.300)				(0.394)	(0.366)	(0.417)		(0.431)
	0.000		0.000				0.000	0.000	0.000		0.000
	-0.247		-0.335				-0.535	-0.380	-0.618		-0.115
	(0.106)		(0.118)				(0.155)	(0.158)	(0.164)		(0.169)
				-0.223	-0.179						
				(0.231)	(0.395)						
				-0.197	0.178						
				(0.195)	(0.409)						
				0.080	0.016						
				(0.227)	(0.381)						
				-0.339	0.016						
				(0.224)	(0.465)						
				0.268	0.173						
				(0.226)	(0.357)						
				-0.811	-0.490						
				(0.219)	(0.364)						
				0.000	0.000						

highlight here. Most notable is the persistent significance of *Sex* in explaining ratings for performance priorities that relate predominantly to the primary care physician's demonstration of clinical (diagnostic) knowledge, interpersonal skills and responsiveness reflected in accessibility, or availing respondents of specialty services when needed (PC1 through PC8 in Table 3)(To view table visit http://www.longwoods.com/product.php?productid=20170). In 2004, female respondents generally rated priorities PC1 through to PC8 half a point higher on the 10-point scale than male respondents.

Though less striking than *Sex*, *Province* also played a consistently significant role in explaining ratings for three of the performance priorities over both observation years – PC1, PC2 and PC7. Specifically, respondents residing in Quebec rated these priorities significantly lower than respondents from all other jurisdictions; knowledge, diagnostic skills and time spent with the patient were considered of less importance by Quebec respondents than by respondents in other provinces.

Income and *Education* were consistently significant over the two observation years in explaining PC9, which relates to whether the patient is reminded of check-ups, tests or immunizations. Respondents within the highest income category rated PC9 almost one point lower than did respondents earning less that $20,000 annually. Respondents with less than secondary education consistently rated PC9 higher than respondents with higher levels of education. In 2004, respondents with less than secondary education rated PC9 more than one and a half points higher than did respondents with secondary education and over two points higher than respondents with post-secondary education. To put this finding into perspective, a respondent earning less than $20,000 with less than secondary education would, in 2004, award a rating of 9.3 to PC9, while a respondent earning $50,000 and over with post-secondary education would award the same priority a rating of 6.3, or 3 points lower on a 10-point scale.

Discussion
A promising foundation?
To us, the most remarkable finding – and that of greatest potential significance to policy makers – is the stability at the population level of the performance priority ratings and their similarity to the priorities of consumers identified in other healthcare settings (e.g., Wensing et al. 1998; Haddad et al. 2000; Thom and Campbell 1997). The only significant changes in scores from 2001 to 2004 served to reduce the scores of the most highly rated priorities and to increase the scores of the lowest-rated priorities. This finding may reflect increased public attention to issues of accountability and general anxiety around health system performance, heightened through the Romanow and Kirby reports and through a number of media reports. These effects may be rooted either in respondents' reduced ability to distinguish

major problems in healthcare when confronted with an overabundance of information, or in a generally heightened awareness of healthcare that has rendered all aspects of healthcare "major" priorities for a knowing public that is alert to the erosion of this valued aspect of Canadian society.

Regardless the root cause, our findings offer insights of interest to policy makers intent on establishing a performance measurement strategy for primary care. The stability of the primary care performance priorities offers a promising foundation upon which to develop performance measures. The importance ascribed by the public to these priorities appears stable; therefore, investments in the development of performance measures, and in the accompanying information systems, seem sensible. Further, as suggested by one anonymous reviewer, data collection against a performance measurement system predicated on the 10 priorities presented here could – for the majority of the priorities – be executed easily and inexpensively, through population-based telephone surveys. However, priorities 1, 2 and 4, relating to physician skills (currency, PC1 and level, PC2) and referrals (PC4), present a greater measurement challenge and they are of utmost importance to demonstrating the efficacy of some of the key aspects of recent primary care reform efforts.

Of further interest to policy makers investing in the development of a performance measurement system are our observations relating to the population determinants of the 10 priorities. Our findings can serve as a comparator for changes in population priorities for primary care that may arise in the future. *Sex*, *Province*, *Income* and *Education* emerge as helpful in explaining the primary care performance ratings.

WOMEN ATTACH HIGHER IMPORTANCE TO MOST PERFORMANCE PRIORITIES

Sex, in particular, explains variation in the scores of eight of 10 of the performance priorities, a finding that is consistent with the fact that women are more frequent users of healthcare services themselves and manage the care of dependents. Women may therefore be better situated to evaluate and compare the technical knowledge and interpersonal skills of primary care service providers.

JURISDICTIONAL DIFFERENCES

Province also plays a notable role in explaining variation in priority scores. Respondents residing in Quebec rated three priorities – relating to clinical knowledge, diagnostic skills and time spent with the patient – of significantly lower importance than respondents from all other jurisdictions. We found that Quebec respondents differed in the emphasis given to these three priorities, illustrating slightly different valuation of priorities in different jurisdictions in Canada.

INCOME AND EDUCATION

The fact that respondents within the highest income category attributed less importance to PC9 than did respondents in other income categories suggests to us that accessing physicians or expenditure of resources to complete visits may present less of a challenge to high-income patients than to lower-income patients – an important aspect of care quality to consider when arranging follow-up visits or scheduling appointments, and when planning reform initiatives designed to increase the continuity of care.

Education emerged as a significant explanatory variable in 2004 for four of the performance priorities. In 2004, less than secondary education was always positively associated with priorities PC5, PC6, PC8 and PC10, while post-secondary education always had a negative association with these priorities. Two of these priorities relate to the patient–provider interaction (PC5 and PC6), suggesting that respondents with less education value the interactive component of visits to their primary care providers significantly more than those with higher levels of education. The other two priorities significantly associated with education relate to access to care (PC8 and PC10) and may reflect prior unfavourable experiences with access to care.

Other researchers (e.g., Ross et al. 1993) who have remarked on similar differences in patient preferences (importance rankings) by age and income have suggested that they reflect differences in discretionary purchasing capacity or in the ability to exercise choice among service providers. Those patients with greater choice or more discretionary power tend to hold a more consumerist view than those with less discretionary power; therefore, they value, choose and evaluate the same services differently. What our findings suggest to us is the importance of provider–patient relationships, service accessibility and effective reminder/follow-up systems in primary care when serving lower-income and lower-education populations.

ACCESS TO CARE

Finally, we note the consistently low prioritization of access to care. Waiting time for a non-urgent appointment remains the lowest priority for primary care performance, despite attention at the federal and provincial levels to issues of access and ways to address them (e.g., the development of health human resources policies to increase the number of primary care physicians, the development of multidisciplinary models of care to increase access and a pan-Canadian commitment to report on access to care). On the other hand, access to referred services and to urgent care outside regular office hours are rated as considerably more important.

TECHNICAL AND INTERPERSONAL SKILLS

Our observations in this study suggest to us that policies in primary care, including those relating to measurement systems, should continue to focus predominantly on

sustaining and reinforcing those aspects of care that are highly valued by consumers – that is, the technical and interpersonal skills of their physicians. In general, respondents value physicians' technical skills along with their communication skills, and place comparatively less value on the importance of practice management aspects of primary care. Some studies have suggested that consumers of healthcare are not generally capable of accurately assessing the technical quality of care they receive (Wensing et al. 1998; Bowers et al. 1994) – instead, they base their assessments of technical quality on physicians' interpersonal skills, including communication skills. Although Canadians value technical competence in primary care physicians, they may not be able to assess it.

Prior studies on patient satisfaction

To our knowledge, ours is the first population-based study of primary care performance priorities pertaining to Canada, and one of a few existing studies of patient priorities for primary care that is based on population data. Most studies of patient preferences and values, as they relate to primary care, have examined patients' views, their levels of satisfaction or opinions. That said, while we examined population-level data to ascertain values placed on performance priorities, our findings are not incompatible with those of other studies that have focused on patient satisfaction or opinion.

In their assessment of consumer satisfaction criteria across general practice, dental and hospital settings in the United Kingdom, Williams and Calnan (1991) found that four variables served as key predictors of overall satisfaction with general practitioners (GPs): the giving of information by the GP, the GP's medical skills, the GP's personal skills and the patient's faith in doctors. In the same study, both age and gender significantly influenced consumer satisfaction: older people tended to be more satisfied with most aspects of general practice than their younger or middle-aged counterparts, and women tended to be slightly less satisfied overall with general practice.

A subsequent review paper completed by Lewis (1994) summarized the methods by which patient satisfaction is assessed and the factors shown consistently to influence patient satisfaction. While Lewis notes that age and sex are variables that emerge fairly consistently as predictors of patient satisfaction across a variety of studies and settings, he highlights the findings of a number of meta-analyses and a few other discrete studies showing that both technical and interpersonal skills are valued by patients. This observation is corroborated in the review of literature on patient priorities for general practice care completed by Wensing and colleagues (1998).

A study published in 2005 by Fung and colleagues helped to clarify the "trade-offs" that patients make when selecting primary care physicians and setting priorities in the context of report cards: while two-thirds of study participants selected physicians with higher technical skills (and lower interpersonal skills) over physicians with higher

interpersonal skills (and lower technical skills), a substantial proportion (one-third) still preferred physicians of high interpersonal quality.

Study limitations

While we examined provincial differences in priority ratings, and found negligible differences in ratings across provinces, our data did not permit us to examine finer-grained contextual differences. Respondents in rural settings, for example, may experience the availability and access to primary care services and other healthcare services differently than those in urban settings, and so value them differently. Future research that examines the relationship between medical rurality and performance priority ratings is merited.

While the sample weighting we undertook mitigates the effects of bias inherent in our low response rates, it does so only in light of factors that have been identified in the literature, *a priori*, as significant determinants of patient satisfaction (i.e., age, gender and geographic location). It is possible, therefore, that other respondent biases are not taken into account (e.g., religion, immigrant status, political orientation).

Finally, while the population demographics of respondents were relatively stable across the two observation years, we noted earlier that our sample was biased in that there was an over-representation of educated Canadians.

Conclusions

Our study aimed to establish the public's priorities for primary care performance, to assess their stability over time and to reveal variation across the priorities among different subgroups of the population. Our findings offer the basis for a meaningful, feasible, national public performance reporting strategy for primary healthcare reform where measures are predicated on 10 performance priorities highly valued by the Canadian population.

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Note

[1] In 2001 and 2004, Canadian consumers were asked questions relating to both primary care and acute care performance priorities. We focus here exclusively on the questions relating to primary care performance priorities; the results of the acute care part of the survey have been published elsewhere (see Sandoval et al. 2007).

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