

Improving the Quality and Capacity of Canada's Health Services: Primary Care Physician Perspectives

Amélioration de la qualité et de la capacité des
services de santé du Canada : points de vue des
médecins de premier recours



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Abstract

Objective: This study set out to identify the perspectives of family physicians (FP/GPs) on the quality and capacity of the services they provide and of the system in which they work, to assess their responsiveness to potential changes and to determine their suggestions for future directions to enhance primary care services.

Methods: Thematic results from prior focus groups with FP/GPs provided direction for a questionnaire sent to practitioners in the urban study area. Seventy-four questions, most using a five-point Likert scale, were grouped into 10 sections: physician issues (based on themes from the focus groups), access to specialist services, workload, scope of practice, primary care physician networks, interdisciplinary collaborative practice, complexities and challenges of family practice, future directions, comments and demographics.

Results: Five hundred and eighty-three FP/GPs were surveyed, and 300 responses (52%) were analyzed for frequencies and comparisons using SPSS. In addition to informative responses to the various survey sections noted above, specific physician suggestions for future directions to improve quality and capacity were identified. These included access to specialists/consultants, teamwork/collaborative practice, access to diagnostics, electronic records/technology, time and remuneration.

Conclusions: The identified suggestions by FP/GPs to enhance the quality and capacity of health services contribute to a framework for policy development at national, provincial/territorial and regional levels and can be used as a reference point for the progress of primary care reform initiatives.

Résumé

Objectif : L'étude vise à déterminer le point de vue des médecins de famille (MF/MG) sur la qualité et la capacité des services qu'ils offrent et sur le système dans lequel ils travaillent, à évaluer leur souplesse face aux changements potentiels et à déterminer leurs suggestions sur les orientations futures en vue d'améliorer les services de soins primaires.

Méthodes : Les résultats thématiques découlant de groupes de travail antérieurs avec les MF/MG ont déterminé l'orientation du questionnaire envoyé aux praticiens de

la zone d'étude urbaine. Soixante-quatorze questions, dont la plupart sont élaborées à partir d'une échelle à cinq points de Likert, ont été regroupées en 10 catégories : problématiques des médecins (selon les thèmes dégagés lors des groupes de discussion), accès aux services de spécialistes, charge de travail, champ d'exercice, réseaux de médecins de premier recours, pratique collaborative interdisciplinaire, complexités et défis de la pratique familiale, orientations futures, commentaires et démographie.

Résultats : On a envoyé un questionnaire à 583 MF/MG, et analysé 300 réponses (soit 52 %) en utilisant le programme SPSS en vue de déterminer la fréquence et d'effectuer des comparaisons. En plus des réponses informatives aux diverses sections de l'enquête susmentionnées, on a dégagé des suggestions particulières formulées par les médecins au sujet de futures orientations pour améliorer la qualité et la capacité. Ces orientations comprenaient l'accès à des spécialistes ou à des consultants, des pratiques faisant appel au travail d'équipe et à la collaboration, les dossiers électroniques et la technologie, l'accès au diagnostic, le temps et la rémunération.

Conclusions : Les suggestions formulées par les MF/MG en vue d'améliorer la qualité et la capacité des services de santé contribuent à un cadre d'élaboration de politiques aux échelons national, provincial, territorial et régional et peuvent servir de référence pour faire avancer les initiatives de réforme des soins primaires.

WHILE THERE HAS BEEN MUCH DISCUSSION CONCERNING THE SUSTAINABILITY and improvement of Canada's health system, the perspectives of front-line practitioners in primary care have not been the focus of reported research. There have been no published reports of the extent to which their views have been identified and/or adopted in the reform process. Recent Canadian national and provincial commissions have highlighted primary care reform (National Forum on Health 1997; Mazankowski 2001; Fyke 2001; Romanow 2002). It has been suggested that there are underlying factors both motivating and inhibiting health system changes (Tuohy 1999). Progress with primary care reform has been notably slow (Hutchison et al. 2001) and without the benefit of needed infrastructure investment (Hutchison 2007). An international survey of primary care physicians in seven countries indicated the inadequate current status of Canada's primary care system in comparison to other nations (Schoen et al. 2006). Understanding the realities of primary care service provision and identifying the enhancing and inhibiting policies and processes of Canada's health system could help to guide change. Perspectives of practising physicians could inform policy makers and planners who have an interest in health system efficiency, effectiveness and productivity.

While Canada has benefited from national and provincial professional groups reporting on the challenges faced by healthcare practitioners and on potential solu-

tions, the degree to which these suggestions address the realities of working in community primary care practice is questionable. Thomson et al. (2001) have complained about the inadequacy of physician input to such reports. Although changes in policy and practice related to primary care have been proceeding, there has been a paucity of empirical data to support or direct these changes.

With the background of a prior qualitative investigation, this study utilized a survey conducted in an urban health region to determine FP/GP perspectives on the quality and capacity of the services these physicians provide and the system in which they work. The survey also assessed FP/GP attitudes to potential changes and elicited their suggestions to enhance the quality and capacity of primary care services.

Methods

In a prior study, nine focus groups were conducted with a total of 46 FP/GPs to determine their perspectives on the quality and capacity of the services they provide and the system in which they work. Qualitative analysis identified eight themes related to the quality and capacity of primary care services (Moores 2004).

For the present study, a project steering committee consisting of practitioners, decision-makers, policy makers and researchers reviewed the major themes identified from the focus groups and developed a questionnaire that was pilot tested with six FP/GPs and modified before use. The regional health authority (Capital Health), the ministry of health (Alberta Health and Wellness) and the provincial medical association (Alberta Medical Association) were included as key decision-makers on the steering committee. The questionnaire was sent to 583 FP/GPs of the 821 initially identified as providing general practice services in the Edmonton region (Capital Health) of Alberta. These 583 physicians had reported to the licensing authority (College of Physicians and Surgeons of Alberta) that they spent 30% or more of their time in family/general practice. One reminder was sent to all, and a complete second mail-out was sent to non-responders after four weeks.

The survey questionnaire consisted of 74 questions, most using a five-point Likert scale, grouped into the following 10 sections: physician issues (based on themes from the focus groups), access to specialist services, workload, scope of practice, primary care physician networks, interdisciplinary collaborative practice, complexities and challenges of family practice, future directions (see below), comments and demographics.

In the "future directions" section, respondents were asked to identify five strategies needed to improve the quality and capacity of their practice and then to rank them in order of personal priority. Respondents were asked to provide any additional comments on how to improve the quality and capacity of family practice within the Capital Health region.

Descriptive data analysis was conducted using SPSS (Statistical Program for the Social Sciences). The data were analyzed by age groups, gender, practice organization (group, solo) and place of graduation (Canada, other countries). Chi-squares were used to test for differences between categorical variables. An alpha level of .05 was employed to test for statistical significance. The study was peer-review funded through Alberta Health and Wellness and Alberta Medical Association's MSB Innovation Fund. The study was approved by the Health Research Ethics Board of the University of Alberta.

Survey Results

Of the 583 questionnaires sent, 300 (52%) were returned and analyzed. The demographic characteristics of the total sample compared to respondents, and the respondents' practice organization and place of graduation, are shown in Table 1. Slightly more females responded than males. The age of respondents was similar to the total sample. Females were more frequent among the younger respondents, males among the older respondents, and gender prevalence was similar in the 45–54 age group.

Among the respondents, 69% of FP/GPs reported being in group practice, an additional 10% reported being in FP/GP/specialist group practice and 21% in solo practice. The cumulative percentage in group practice (79%) is higher than in the National Physician Survey (NPS 2004), which indicated that 61% of GPs were in group practice and 17% in solo practice. The reasons for the difference in group practice are not certain, but the fact that our sample is entirely urban probably contributes significantly. The NPS did not identify an FP/GP/specialist group as a category. Seventy-seven percent of the respondents were Canadian graduates and 21% were international graduates. Unless otherwise noted, there were no significant differences by age or gender in the variables described below.

Physician Issues assessed respondent levels of agreement with quotations arising from the previous focus group study (Table 2). There were high levels of agreement (75%–97%), with nine of 11 of the quotations presented. Two quotations included more than one theme or concept in a single statement. This may account for their receiving lower agreement levels (24% and 25%) and the highest levels of neutral responses (34% and 38%).

Access to Specialists' Services was a major issue. Agreement/strong agreement (86%–97%) with four of the five statements is shown in Table 3. The necessity to know consultants personally as a precondition for referral had the lowest level of agreement (61%) and the highest level of neutral responses (32%). Women were more interested than men in short verbal consultations (91.4% vs. 82.4%, $p < .04$)

Workload Issues (hours worked, number of patients seen per hour and the number of problems that patients wished addressed at a visit) were also considered important. Thirty-two percent of respondents worked more than 40 hours per week and 28%

expressed a desire to decrease the office hours they worked to below 40. Forty-three percent of respondents saw six or more patients per hour and 30% desired to decrease the numbers of patients seen per hour to below six.

TABLE 1. Comparison of demographic information: total sample and responders

Characteristic	Total Sample (%)	Responders (%)
Sex		
Male	60.5	55.3
Female	39.5	42.7
Not Recorded	0.0	2.0
Age Groupings (Male/Female)		
≤ 34 yrs	11.5	11.3 (7.8/16.8)
35–44 yrs	30.7	30.0 (25.9/37.6)
45–54 yrs	34.5	35.7 (36.7/36.8)
55–64 yrs	16.6	15.0 (21.7/7.2)
65+	6.7	5.0 (7.8/1.6)
Not Recorded	0.0	3.0
Practice Organization		
Solo	N/A	17.3
FP/GP Group	N/A	68.7
FP/GP/Specialist Group	N/A	10.3
No Response	N/A	3.7
Graduation Location		
Canada	N/A	77.3
Other	N/A	21.0
Not Recorded		1.7

N/A = Not Available

Under *Scope of Practice*, respondents were asked to state their levels of interest in providing specific types of services in the context of a “new and appropriately supported primary healthcare system.” They were also asked whether they currently provided such a service. As shown in Table 4, respondents provided a wide range of in-office and in-hospital direct patient services. On-call and house-call services and preventive

care had the highest levels of current provision, and comprehensive preventive care and on-call services the highest levels of interest. When gender differences in *Interest* were examined, men were more interested in in-hospital care for their own/unassigned patients than women (49.7/13.3 vs. 33.1/6.4, $p < .05$). Similarly, male interest exceeded female interest in palliative care (62.8 vs. 47.2, $p < .01$), long-term/home care (47.5 vs. 21, $p < .01$) and house calls (58.8 vs. 36.6, $p < .01$). Women were more interested than men in prenatal/intrapartum care (71.2/48.7 vs. 30.6/16.9, $p < .01$). Results of the analysis by gender of the responses regarding *Currently Provided* services paralleled the results for expressed *Interest* except in the case of palliative care.

TABLE 2. Levels of agreement with thematic quotations

	U/NR	SD/D	Neutral	A/SA
"Time is the number one issue with family physicians."	1%	4%	9%	86%
"Patients should have accountabilities and responsibilities within the system."			2%	97%
"Quality is something the system absolutely doesn't come even close to paying for."	1%	6%	12%	81%
"I get tired of having to fight the system to try to get the facilities and treatment that my patients need."		3%	9%	88%
"The regions should be investing in family medicine because we are looking after their citizens in the community."	2%		8%	90%
"When we have a complicated patient in the hospital, there is no question we are working with that patient as a team. The patients in the office these days are often as complicated as that patient in the hospital ... it would be ideal to have access to those same resources."	1%	2%	9%	87%
"The system has changed such that to do the same amount of care [as was previously done] requires a significant increase in the amount of time."	3%	3%	11%	83%
"We are known as 'system integrators.' That's what we do all day. The reason that we are a reliable system integrator is because we have a professional ethic that drives us to do that. There is no one else in the system that carries that burden."	4%	3%	14%	79%
"I spend a lot of my day doing things that I shouldn't be doing. We need to offload some of the things we do so that we can spend the right time doing the right services for the right patients."		6%	18%	75%
"There is a whole group of physicians in the city who were denied hospital privileges for no good reason ... who were marginalized."	17%	20%	38%	25%
"I'm not sure where I'm at with quality, because I don't have the tools for quality assessment."	6%	36%	34%	24%

Percentages may not total 100% due to non-responses.

U/NR=Undecided/No Response

SD/D=Strongly Disagree/Disagree

A/SA=Agree/Strongly Agree

TABLE 3. Levels of agreement (%) regarding access to specialist/consultant services

Statement	Strongly Disagree/ Disagree	Neutral	Agree/ Strongly Agree
I need to get my patients seen by a consultant in a more timely fashion.	0.6	2.0	97.3
Patients should have an identifiable family physician who coordinates access to consultants.	2.0	5.0	92.3
The referral process needs to be easier and less time-consuming.	3.0	9.3	87.7
I would like access to short verbal consultations with specialists.	2.0	11.7	86.0
I need to know my consultants on a personal basis.	6.3	32.3	61.0

Percentages may not total 100% due to non-responses.

TABLE 4. Levels of interest (%) in types of service provision and current provision levels

Service	Undecided	Very Uninterested/ Uninterested	Neutral	Interested/ Very Interested	Currently Provide
On-call group	6.7	17.0	16.3	56.7	71.3
House calls	0.7	25.7	21	46.4	63.0
Comprehensive preventive care	0.0	3.0	9.3	81.7	62.0
Prenatal care	0.0	25.7	14.7	55.7	60.3
Care to high-intensity, multi-problem patients	0.0	24.7	26.7	44.6	60.3
Palliative care	0.3	21.6	20.3	53.0	58.0
Long-term care/nursing home care	1.0	41.6	18.7	34.3	42.0
In-hospital care for your own/group's patients	2.7	35.4	17.0	39.7	34.3
Intrapartum care	0.7	62.0	12.0	22.0	19.3
In-hospital care for unassigned patients	1.3	70.0	14.7	10.0	17.7
Working as a hospitalist	1.3	70.4	13.7	12.4	3.3

Percentages may not total 100% due to non-responses.

Analysis of *Interest* by age showed a marked decline in participating in on-call for the 35–44 age group, against a backdrop of slow decline with increasing age ($p < .01$). A similar pattern was seen for in-hospital care for one's own/one's group's patients

($p < .05$). Interest in long-term care/nursing home care increased in the age group 45–54 and declined among respondents 65 and older ($p < .01$). Interest in prenatal care declined with increasing age ($p < .01$). Analysis of the *Currently Provided* services by age revealed statistically significant variation in several areas. On-call services provision decreased with age except for an increase in the 45–54 age group ($p < .01$). Palliative care service provision increased until 45–54 years and declined afterwards ($p < .01$). Long-term/home care service provision was lower for the <34 and 35–44 age groups, and peaked in the 45–54 and 55–64 age groups before declining ($p < .01$). The provision of house calls increased with age to 45–54 years and then declined ($p < .01$). Prenatal care declined with age ($p < .01$). The care of high-intensity patients increased with age to 35–44 years and then declined ($p < .01$), and comprehensive preventive care declined with age ($p < .01$).

Analysis by practice organization indicated that group practices and FP/specialty group practices were more likely than solo (single-handed) practices to provide on-call, hospital unassigned patient coverage and palliative, long-term/home, intrapartum, high-intensity and comprehensive preventive care ($p < .05$).

Analysis by location of graduation revealed that graduates of Canadian medical schools were more likely to provide the following services: on-call ($p < .01$), in-hospital care for own/unassigned patients ($p < .01/.05$), palliative care, house calls, intrapartum care, high-intensity patient care and comprehensive preventive care ($p < .01$).

The *Primary Care Physician Networks* section concerned levels of interest in this organizational approach to quality and capacity improvement. These networks were described as a real or virtual group, practising either in the same office setting or in different locations, but electronically linked to facilitate transfer of information and sharing of responsibilities. Levels of support and interest in different attributes of a physician network were examined in the proposed context of no increase in overhead costs or decrease in income.

As shown in Table 5, interest was substantial in collective practice (66%) and 24/7 on-call arrangements (52%). Men were more interested than women in 24/7 on-call (59.4% vs. 45.2%, $p < .01$). Physicians over age 65 were least interested. Interest was very high in nine attributes of electronic linkages and electronic medical records (74%–97%).

The results of questions on *Interdisciplinary Collaborative Practice* have been described elsewhere and indicate a large gap between FP/GP positive interest and willingness to collaborate with a wide variety of health professionals and their current involvement in teamwork (Wilson et al. 2005).

The *Complexities and Challenges of Family Practice* section assessed levels of support for options that might improve quality and capacity. The prior focus groups had indicated that family physicians were working in situations of increasing complexity of illnesses and higher patient and system expectations. Such circumstances required

more intricate and efficient medical decision-making and a greater need to access and expedite testing, test results, consultations and other information and resources within the health system. Survey respondents were asked to rate several initiatives in terms of usefulness in providing higher-quality care. There was strong support (69%–97%) for the utility of all the suggested quality improvement initiatives (Table 6), including timely access to diagnostic tests, electronic access to test results and access to other health professionals. However, access to a quality assurance service had less support (55%), and a minority of respondents (41%) supported triage of patients by another health professional.

TABLE 5. Levels of interest (%) in physician networks and electronic linkages/records

Attribute	Undecided	Very Uninterested/Uninterested	Neutral	Interested/Very Interested
Physician Networks				
Linking with other FPs to collectively provide a full range of services	2.0	11.4	18.3	66.3
24/7 call arrangement with other FPs	3.0	22.0	21.7	52.3
Electronic Linkages/Records				
Alerts for allergies/drug interactions	0.3	2.0	1.7	95.7
Maintain/update medication lists	0.3	2.4	2.3	94.4
Track diagnostic tests	0.7	2.3	4.3	92.3
Maintain/update problem list/risk profile	0.7	2.7	5.7	90.4
Track prescriptions	0.7	3.0	7.0	89.0
Maintain/update patient records	0.7	5.3	7.7	86.0
Automatic recall/notification of patients	2.7	4.4	6.3	85.7
Accept entry of guidelines and prompt their usage	2.7	5.3	12.3	79.0
Identify population/patient characteristics	1.7	6.4	17.7	73.7

Percentages may not equal 100% due to non-responses.

There were no differences by age; men were more likely than women to view access to a quality assurance service as helpful (61.3 vs. 48.8, $p < .05$).

The *Future Directions* section provided respondents with an open-response opportunity to identify and rank up to five of their own suggestions to enhance the quality and capacity of their practices. At least one suggestion was provided by 222 respondents. In

total, 1,066 suggestions were made, with an average of 3.55 suggestions per respondent. These results in many cases mirrored or reinforced other sections of the survey data. Ninety-eight categories of suggestions were consolidated into 13 major categories. Most of these major categories corresponded to sections of the questionnaire, but there were also some additional categories. It was not possible to compare these categories by age and sex of respondents because of the large number of categories grouped together by qualitative assessment to arrive at the 13 major categories.

TABLE 6. Usefulness of options (%) for higher quality/capacity of care

Option	Undecided	Not at All Useful/Not Useful	Neutral	Useful/Very Useful
Electronic Information Access				
Electronic access to test results	0.3	1.0	7.3	90.4
Electronically searchable patient records	2.0	2.4	16.3	78.3
Point of care access to guidelines/clinical information	2.7	5.4	17	73.0
Resource Access				
Timely access to diagnostic testing	0.3	0.3	0.6	97.3
Phone consultation with specialists	0.0	0.0	5.0	94.0
Access to counselling services	0.0	0.6	5.0	92.3
Access to a pharmacist	0.0	1.0	11.7	86.3
Access to a social worker	0.6	3.4	18.0	76.9
Practice Management				
Special-focus clinics within the practice	2.0	5.6	21.7	69.3
Access to a quality assurance service	5.0	4.3	34.0	55.3
Triage of patients by another health professional	3.7	26.7	27.0	40.7

Percentages may not equal 100% due to non-responses.

Future Directions

Suggestions included the following:

- *Access to Specialists/Consultants* was the largest category among the 1,066 cited suggestions, comprising 21% of suggestions. The top issues were quicker access to specialists, the provision of phone consultations and simpler consultation and

referral processes.

- *Teamwork/Collaborative Practice* suggestions (15%) identified, among others, a nurse in the practice (preferably funded), a funded interdisciplinary team (in the office or associated with the practice), better access to mental health services and to other healthcare professionals, a nurse practitioner in the office, the ability to delegate more to staff and more extensive access to home care services. A prerequisite for collaborative practice, no increase in overhead expenses and no decrease in income, had been identified in the earlier focus group study. A deeper analysis of collaborative practice issues is provided elsewhere (Wilson et al. 2005). There was substantial interest in future work with other health professionals but strikingly fewer current working relationships. This large gap must be addressed if collaborative practice is to increase in line with the goals of primary care reform in Canada.
- *Access to Diagnostics* (12% of suggestions) indicated the need for quicker and better access to diagnostic facilities and improved quality and/or quicker return of lab reports and documentation of patient encounters elsewhere in the system.
- *Electronic Records/Technology* (12%) included electronic technology in physicians' offices, paid for and supported by the system. There were specific suggestions as to what the electronic record should be able to do to enhance quality and capacity.
- *Time* (11%) suggested the need for more time per patient. Physicians wanted less paperwork, less bureaucracy and less time spent on work better done by others.
- *Remuneration* (10%) suggested adequate remuneration to compensate for spending appropriate time with complex patients, patients with multiple problems at a single visit, for activities such as long-term care and hospital work, and payment for non-face-to-face patient care. Both the mechanism of payment and relative value of payment were expected to respect these characteristics.
- The *Health Professional Resource Planning* (5%) category focused on the numbers and kinds of health professionals in general. Specifically, respondents wanted the number of FP/GPs to be increased and the scopes of their service provision to be expanded. The limited availability of other health professionals was also a significant concern.
- *Office and Practice Management* (3%) highlighted the need for assistance in better planning and managing of medical offices and practices. Also noted were office space and layout, the availability of support staff and the need for education and training to work in teams.
- *Hospital Issues* (3%) reflected on FP/GP access to beds and outpatient services without having to refer through the emergency room or a specialist. Facilitating access to the ER and expediting patient transfers were also cited as part of a quality and capacity improvement process.
- *Accountability and Responsibility Issues* (3%) focused on the need for public education and accountability in terms of more appropriate use of the health system.

Citizens were expected to be more independent and oriented towards self-care. Of particular concern were the "system abuses" manifested by obtaining multiple consultations with different physicians for a single episode of illness, not taking responsibility for keeping appointments and not following through with, nor following up on, tests or consultations. Accountabilities of other stakeholders (physicians, managers, health authorities and governments) were also noted and challenged. In particular, physician practices characterized by limited scope, high volume and low complexity were criticized.

Other comments offered by respondents included concern about the additional costs of developing an improved system, the need for dedicated funding for new initiatives, the necessary improvement of interprofessional behaviours between specialists and FP/GPs, investment and support for primary care groups, the need for and use of evidence-based policy development and the importance of enhanced respect for family/general practice. FP/GPs were experiencing difficulty in providing optimal services for patients in the context of a health system that does not focus on primary care.

Discussion

This study was conducted within the boundaries of a large urban health authority in Alberta. The results may not reflect the quality and capacity challenges for FP/GPs in more rural environments, other urban centres or other provinces or territories of Canada and should be repeated in other venues. The study was confined to primary care family physicians, although it is recognized that there are other providers of first-contact health services. In addition, it is important to consider the views of the public as service users. The findings do, however, provide evidence regarding physician perspectives on current and future issues in primary care that should be considered in planning for changes in policy and service delivery.

Calls for primary care renewal as a critical component of a more comprehensive and integrated approach to health system reform began in the 1990s with the publication of the perspectives of the five Ontario Chairs of Family Medicine (Forster et al. 1994). In 2000, the College of Family Physicians of Canada published a policy paper that included recommendations related to family physician networks, interdisciplinary teams, patient choice and information technology. Several primary care initiatives have emerged in Canada (Ontario Ministry of Health and Long-Term Care 2003) within the time frame of this work. For example, many of the initiatives in Alberta are compatible with the findings of the current study (Alberta Health and Wellness 2006).

Although changes in policy and practice related to primary care have been proceeding, there has been a paucity of empirical data to support these changes. The present study provides information that permits an assessment of the extent to which

current federal, provincial and regional policies are likely to be supported by our respondents and the degree to which their “future directions” suggestions are addressed.

Policies and organizational approaches are needed that simplify and enhance the effectiveness and efficiency of the consultation and referral process. Despite efforts on the part of the College of Family Physicians of Canada and the Royal College of Physicians and Surgeons of Canada (1993) to identify and clarify issues in these relationships, there is little or no evidence that this identified major quality and capacity factor is a focus of any primary care reform initiative or policy in Canada.

The focus by policy makers on scopes of practice or skill mix in primary care may be rooted in assumptions that much of what FP/GPs do could be done more effectively and cheaply by others. Billing data form the foundation for these conclusions, but the complexity and comprehensiveness of primary care practice are not captured by these data. Our findings indicate that to improve quality, FP/GPs want to spend more time with each patient and to reduce the numbers of patients seen per hour without a significant reduction in income. What current policy approaches foster and enhance interdisciplinary collaborative practice? What are the sources of support and funding, and will they be sufficient to cover not only the remuneration costs for other health professionals but also team development and maintenance? The organizational, management and funding approaches used in the acute care (hospital) sector might be helpful in the primary care setting.

The responding FP/GPs reported significant problems in accessing testing, and specific problems for patients with special needs (chronic conditions, co-morbidity and the elderly). Similar problems were encountered in Ontario (Coalition of Family Physicians of Ontario 2006). Current policies and operating procedures force the adoption of unnecessary and expensive consultations and/or referrals in order to obtain appropriate testing. At the same time, less experienced individuals (medical students and residents) have open access to such testing through their work in tertiary care settings.

Our respondents were very interested in the introduction of electronic medical records (EMRs). Alberta introduced the Physician Office System Program (POSP) in 2001 to support the adoption of EMR technologies. The POSP program has a time and payment limitation, on the assumption that physician practices will absorb the overhead costs of maintaining and expanding the system based on improved patient volumes achieved. In the meantime, Alberta Health and Wellness continues to fund hospital-based electronic systems maintenance and expansions. Whether the health system will support the EMRs and electronic health records (EHRs) in primary care seems critical to primary care’s viability and performance.

Much of the primary care reform policy focus appears to have been on mechanisms of remuneration as opposed to the levels of remuneration for complexity, comprehensiveness and quality. Although the subject of remuneration was not a focus of

our study, maintaining income in the presence of innovation, teamwork and delegation of activity were concerns of the FP/GPs. The medical profession's apparent reluctance to embrace alternative remuneration systems needs to be better understood and addressed. The National Physicians Survey (NPS 2004) indicates that "fee for service only" is the preferred option of only about 25% of FPs/GP, with 50% preferring "blended payment." This method would presumably allow for greater recognition of complexity, comprehensiveness and quality.

Policies concerning physician resource planning in Canada have not yet addressed the disadvantaged career opportunity that family physicians face. The huge medical-industrial complex in Canada clearly favours institutional and acute care and support of the specialist and subspecialist over the generalist. Little has changed since this inequity was first highlighted by Barer and Stoddart (1992). The impact of the various facets of the "hidden curriculum" (e.g., the denigration and discounting of the impact and roles of generalism, primary care and family practice) need to be identified and addressed (Avinashi and Shouldice 2006; Bethune et al. 2007; Large 2004). Evidence that primary care has positive effects on health outcomes for individuals and the population (Macinko 2007) is not reflected in the primary care output of Canada's medical schools.

Canada faces many challenges regarding the sustainability, capacity and quality of its health services. Our reported levels of interest of FPs/GPs in the attributes of quality and capacity of health services bode well for primary care reform and the sustainability of Canada's health system. However, the degree to which proposed primary care reforms will successfully address key concerns of FP/GPs remains to be seen. Without an integrated approach to addressing these issues, accompanied by adequate resources, primary care reform is unlikely to achieve its quality and capacity potential – an essential prerequisite for overall health system performance.

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