PRIMARY CARE IN NOVA SCOTIA:

PATIENT VALUES AND EXPERIENCES.

RESULTS FROM THE QUALITY AND COSTS OF PRIMARY CARE CANADA (QUALICOPC) STUDY



Fred Burge, Beverley Lawson, Lynn Lethbridge

Primary Care Research Unit
Dalhousie Family Medicine
With thanks to Michelle Boudreau



EXECUTIVE SUMMARY

PRIMARY CARE IN NOVA SCOTIA: PATIENT VALUES AND EXPERIENCES.

RESULTS FROM THE QUALITY AND COSTS OF PRIMARY CARE CANADA (QUALICOPC) STUDY

The Quality and Costs of Primary Care (QUALICOPC) Canada study is an extension of an international project in which primary care patients were asked to rate how important, or how they valued, various aspects of primary care, as well as their experience with primary care service delivery. Each participating primary care physician also completed a survey about their practice setting and the services they provide. Through this study design, patient experiences with care and how aspects of primary care are valued may be linked to individual physician services and practice delivery for a comprehensive source of patient-centred information.

The purpose of this report is to examine which aspects of primary care, as represented by four dimensions of care developed in the literature (Access, Communication and Patient Centredness, Continuity and Coordination, Patient Activation) are valued as most important to primary care patients in Nova Scotia, and to report on patient-reported experience of care associated with the aspects most valued. Patient experiences were ranked for aspects that corresponded to each of the dimensions. Comparisons were made between age groups and also with results from a previous report that presented Canada-wide findings.

In Nova Scotia, a total of 59 primary care providers (family physicians) and 636 patients participated. Overall, patients in Nova Scotia viewed aspects of primary care associated with the dimension of Communication and Patient Centredness most highly, followed by the dimensions of Continuity and Coordination, Patient Activation, and Access. The aspects of primary care that were valued least were those associated with the dimensions of Access and Continuity and Coordination.

An analysis of individual aspects within each dimension indicated higher variation within Continuity and Coordination, suggesting subdivisions may exist within that category. For example, aspects that could be characterized as Continuity appear to be more highly valued than those considered Coordination.

Although there was general consistency in the overall pattern of how younger and older participating patients rated the importance of various aspects of primary care, distinct differences were apparent across the age groups for some individual aspects. Of the top most valued aspects, those associated with Continuity and Coordination tended to be more highly valued by younger participating patients, whereas those aged 65 years and older rated some aspects of Communication and Patient Activation more highly.

Results of the patient experience with primary care survey indicated providers were rated positively by over 90 percent of respondents for 38 of 54 aspects of care. Overall, this suggests respondents in Nova Scotia are satisfied with the primary care they are receiving. Aspects that were rated the lowest included experiences with getting access to primary care services on the day they called or the next day.

Comparisons with the Canada-wide report indicate selected differences between national and provincial results. More respondents from Nova Scotia considered coordination between their family doctor and specialists important relative to Canadians in general. Nova Scotians also tended to give a higher rating to their experience of care associated with the most highly ranked aspects of care.

The QUALICOPC study is a unique source of data that decision-makers can use to help shape primary care policy that is based on patient-reported preferences and priorities. Future work will involve testing associations between physician and practice characteristics and patient experiences to further our understanding of how best to meet the primary care health needs of Nova Scotians.

INTRODUCTION

Patient-centred care was conceptualized relatively recently and is now at the forefront in discussions of quality care(1). "... patients want a patient-centred and positive approach, and if they do not get it they are less satisfied, less enabled, and may suffer greater symptom burden."((2), p 910). Definition, measurement, and evaluation are key to implementing effective policies that have a positive impact on patient outcomes. The Institute of Medicine(3) defines patient centredness as "... providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions."(p 6). Ensuring what patient values guide clinical decisions requires an understanding of what those values are and what policies will address those values. Hudon et al.(4) describes two approaches to measuring patient-centred care: direct observation of encounter and self-assessment. Research has suggested patient-administered questionnaires are the best approach to measuring patient centredness in primary care(4,5). These concepts underpin the Quality and Costs of Primary Care (QUALICOPC) study.

A full description of the QUALICOPC study is provided on the study website (http://www.nivel.nl/en/qualicopc/). Briefly, the QUALICOPC study was focused on a core health-care service: primary care. Administered in 34 countries, it was designed to benchmark and inform primary care policies. In total, four surveys were administered. Surveys were administered to collect information about each participating primary care physician and services provided, their practice setting, patient-reported experience, and patient values. Patients who completed the patient-values survey were not the same as those who completed the patient-experience component. The method used enabled the ability to compare patient experiences with care and how various aspects of primary care are valued, and link this information to individual physician services and practice delivery for a rich source of patient-centred information.

A QUALICOPC Canada report focusing on what primary care aspects are valued by patients, which included all Canadian respondents with participation from all ten provinces, was produced in 2014(6). The goal of that report was to rank the importance patients reported for each aspect across four dimensions of primary care (Access, Communication and Patient Centredness, Continuity and Coordination, Patient Activation) and examine how well primary care physicians were performing with respect to aspects within these dimensions

that were most highly rated. Results indicated aspects associated with Coordination and Patient Centredness as well as Communication and Coordination were more highly ranked by Canadians. Overall, patients reported positive experiences for aspects of care related to the study dimensions that were ranked most highly. National results offer information into which aspects of primary care are most valued for the country in general, and also provide a comparator for individual provinces.

PURPOSE

The purpose of this report is to replicate the methods used in the Canada-wide study to examine which aspects of primary care, as represented by the four dimensions of care developed in the literature (Access, Communication and Patient Centredness, Continuity and Coordination, Patient Activation) are valued as most important to primary care patients in Nova Scotia (NS), and to report on patient-reported experience of care associated with these most valued aspects. It is important to gain insights into what aspects of primary care are valued within individual provinces as there are many factors that could potentially contribute variation, including differences in population characteristics and system organization. The *Canada Health Act* provides guidelines for the country; however, diverse policies may be required across provinces to reflect differing values across jurisdictions. Health care being a provincial responsibility allows for flexibility to shape policy to local circumstances.

METHODS

For the Laberge et al(6) report, the patient-value survey component of the study was analyzed in order to understand which aspects of primary care are important to patients. The approach undertaken by the study authors was to categorize each survey question tapping an aspect of primary care into primary care dimensions of care based on the framework put forth by Wong and Haggerty(7). The 56 statements in the patient values survey were grouped into four dimensions, namely: Continuity and Coordination (n=13), Communication and Patient-Centred Care (n=26), Patient Activation (n=9), and Access (n=8). Respondents were asked to rate the importance of each statement using a four-point scale, "not important," "somewhat important," "important," and "very important." The investigators then ranked all questions by the proportion of respondents who answered "very important." Comparisons were made across dimensions to ascertain the most highly rated and least highly rated values among respondents. That approach was replicated for this report, as well as a more indepth examination of results by patient age groups (<65 years of age, 65 years and older).

For the second phase of the analysis, aspects of primary care within the patient-values survey were matched to questions in the patient-experience survey. Answers from the patient-experience survey were used to rate the care provided by the primary care provider with whom the patient had an appointment that day. Questions were then grouped into each of the four dimensions of primary care and ranked by measuring the proportion of individuals who rated each element positively. Through this approach, patients' views were central to understanding what aspects of primary care they value or feel are important and how well expectations were being met with respect to those values.

The methods for this report followed those set out by Laberge et al(6) in the national report to facilitate comparisons between NS and Canada as a whole. As well, additional analyses were undertaken in which responses from across the entire distribution were utilized including the mean proportion values and variation within each dimension.

RESULTS

In Nova Scotia, a total of 59 family physicians and 636 patients participated. Of these patients, 544 completed the patient experience survey while 92 were asked to rate how important (value) various aspects of primary care were to them. Table 1 shows characteristics of the NS patient population in the QUALICOPC study for both the values and experience surveys. Both surveys had over twice as many female respondents compared with males. More than half of respondents were 55 years of age and older. Education percentages indicate most had at least some post-secondary education: 60 percent for the values survey and 70 percent for the experience survey. Over 80 percent of respondents reported an income equal to or above the national average. Less than half were employed. Finally, over 75 percent of respondents reported their health as very good or good.

Table 1: Participating patient demographics by survey participation

<=34 7.6% 12.3% 35-44 12.0% 9.0% 45-54 21.7% 21.3% 55-64 22.8% 21.3% >= 65 29.4% 32.0% Missing 6.5% 4.0% SEX Male 28.3% 30.9% Female 70.7% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION < grade 10 7.8% 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 17.6% 19.1% Below Average 17.6% 19.1% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 7.5% 24.4%		Patient values survey (n=92)	Patient experience survey (n=544)
35-44	AGE GROUP	·	·
45-54 21.3% 21.3% 21.3% 25.64 22.8% 21.3% 32.0% Missing 6.5% 32.0% 4.0% SEX Male 28.3% 30.9% 67.1% 67.1% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% 600d 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION	<=34	7.6%	12.3%
55-64 22.8% 21.3% >= 65 29.4% 32.0% Missing 6.5% 4.0% SEX Male 28.3% 30.9% Female 70.7% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 40.8% 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% 19.1% Below Average 17.6% 19.1% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	35-44	12.0%	9.0%
>= 65 29.4% 32.0% Missing 6.5% 4.0% SEX Male 28.3% 30.9% Female 70.7% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 4 22.2% 33.6% Grade 10-12 22.2% 33.6% 6.8% Grade 10-12 22.2% 33.6% 8.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% 80.6% INCOME REPORTED AS: 80.6% 19.1% 63.8% Above Average 17.6% 19.1% 63.8% 63.8% Above Average 17.6% 17.2% 95.3% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	45-54	21.7%	21.3%
Missing 6.5% 4.0% SEX Male 28.3% 30.9% Female 70.7% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD 30.4% 24.4%	55-64	22.8%	21.3%
Male 28.3% 30.9% Female 70.7% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 4 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD 30.4% 24.4%	>= 65	29.4%	32.0%
Male 28.3% 30.9% Female 70.7% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 6.8% Grade 10 7.8% 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD 30.4% 24.4%	Missing	6.5%	4.0%
Female 70.7% 67.1% Missing 1.1% 2.0% SELF-REPORTED HEALTH 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION < grade 10	SEX		
Missing 1.1% 2.0% SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 7.8% 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	Male	28.3%	30.9%
SELF-REPORTED HEALTH Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION Value 4 < grade 10	Female	70.7%	67.1%
Very good 24.1% 22.9% Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION qrade 10 7.8% 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	Missing	1.1%	2.0%
Good 54.0% 52.6% Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 3.5% 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	SELF-REPORTED HEALTH		
Fair 18.4% 21.2% Poor 3.5% 3.3% EDUCATION 7.8% 6.8% Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	Very good	24.1%	22.9%
Poor 3.5% 3.3% EDUCATION	Good	54.0%	52.6%
### EDUCATION Standard Stand	Fair	18.4%	21.2%
< grade 10	Poor	3.5%	3.3%
Grade 10-12 22.2% 33.6% Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	EDUCATION		
Post secondary 70.0% 59.7% FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: 80.6% Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	< grade 10	7.8%	6.8%
FLUENT ENGLISH/FRENCH 67.4% 80.6% INCOME REPORTED AS: Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	Grade 10-12	22.2%	33.6%
INCOME REPORTED AS: Below Average	Post secondary	70.0%	59.7%
Below Average 17.6% 19.1% Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <= 18 IN HOUSEHOLD	FLUENT ENGLISH/FRENCH	67.4%	80.6%
Average 64.8% 63.8% Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <= 18 IN HOUSEHOLD	INCOME REPORTED AS:		•
Above Average 17.6% 17.2% BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD	Below Average	17.6%	19.1%
BORN IN CANADA 94.5% 95.3% ABORIGINAL 8.7% 7.5% CHILDREN <=18 IN HOUSEHOLD 30.4% 24.4%	Average	64.8%	63.8%
ABORIGINAL 8.7% 7.5% CHILDREN <= 18 IN HOUSEHOLD	Above Average	17.6%	17.2%
CHILDREN <=18 IN HOUSEHOLD 30.4% 24.4%	BORN IN CANADA	94.5%	95.3%
	ABORIGINAL	8.7%	7.5%
EMPLOYED 47.8% 45.4%	CHILDREN <=18 IN HOUSEHOLD	30.4%	24.4%
	EMPLOYED	47.8%	45.4%

PATIENT RATINGS OF ASPECTS OF PRIMARY CARE AND DIMENSIONS OF CARE (VALUES)

All patients

The proportion of patients who responded "very important" when asked about the importance of the 56 aspects of primary care provision is shown in Figure 1. The figure presents a picture of the overall distribution of individual aspects of primary care as well as for each of the individual dimensions. The distribution ranges from a high of 93.4 percent ("That the doctor knows when to refer me to a medical specialist") to a low of 12.5 percent ("That I can see other health-care professionals in this practice without having to see a doctor"). The results are ordered from highest to lowest with different colours representing aspects associated with the four dimensions of primary care as categorized by Laberge et al(6). Continuity and Coordination is shown in red, Communication and Patient-Centred Care in purple, Patient Activation in green, and Access in yellow. The mean proportion of patients who rated each aspect of primary care as "very important" across all aspects was 50.7 percent. For each dimension, the mean proportion of respondents indicating "very important" was as follows: Communication and Patient-Centred Care, 56.1 percent; Patient Activation, 49.6 percent; Continuity and Coordination, 47.5 percent; and Access, 39.3 percent. Overall ratings of individual aspects making up each dimension varied widely. In particular, there was great deal of variability within the aspects associated with the Continuity and Coordination dimension, with less for Access.

Figure 1: **Proportion of patients rating individual** primary care aspects as "very important"

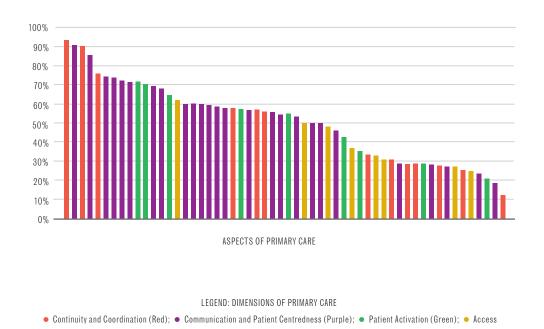
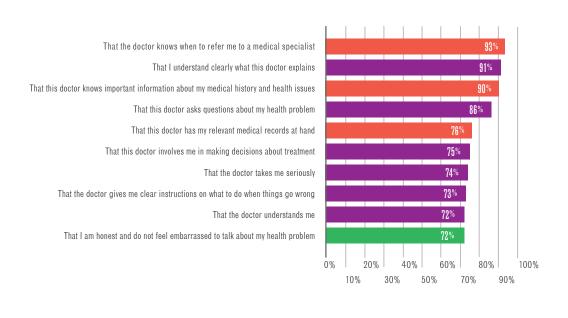


Figure 2a highlights the ten **most highly rated** aspects of care. Communication and Patient-Centredness statements occupy six of the top ten rankings, while Continuity and Coordination appear in three of the top five. Patient Activation can be seen only once (in the tenth highest spot), whereas statements that reflect Access to care are not represented among the aspects that were most highly rated by respondents. Ninety-three percent of respondents indicated that "the doctor knows when to refer me to a medical specialist" is "very important," making it the highest-ranked aspect of care among Nova Scotian respondents.

Figure 2a: The top ten most highly rated aspects of primary care: Proportion of patients rating each as "very important"



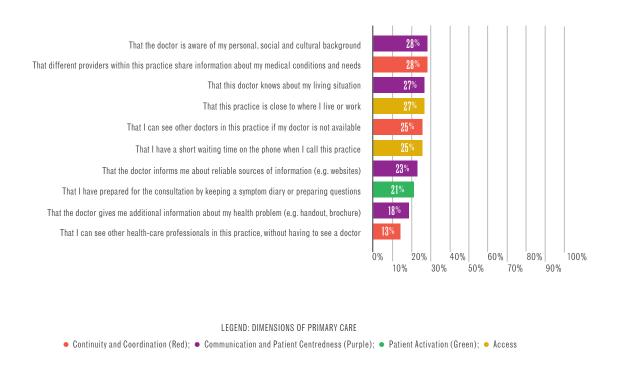
LEGEND: DIMENSIONS OF PRIMARY CARE

• Continuity and Coordination (Red); • Communication and Patient Centredness (Purple); • Patient Activation (Green); • Access

Figure 3a focuses on the **lowest-ranked** aspects of care. "That I can see other health-care professionals in this practice without having to see a doctor" was least valued. Only 13 percent of patients who responded to the survey rated this aspect of primary care as "very important." This statement was also the lowest ranked among all Canadians(6). Of note, all four dimensions were represented in the ten least-important aspects of primary care in NS and in Canada as a whole. Four of the aspects in Figure 3a correspond to Communication and Patient Centredness and three to Continuity and Coordination, which compares with two from the Access category and one from Patient Activation. Because the total number of statements about aspects of primary care that make up each dimension differs, the proportion of aspects ranking in the lowest ten for each

dimension is best used for comparisons. For instance, of the 23 aspects of primary care included as part of the Communication and Patient-Centredness dimension, four were among the least valued (17.4 percent). Similarly, three of sixteen Continuity and Coordination dimension aspects were among the lowest ranked (18.8 percent), two from Access (25 percent), and one from Patient Activation (11.1 percent). Comparisons of these proportions suggest aspects of primary care associated with the dimensions of Access and Continuity and Coordination are valued least.

Figure 3a: The ten lowest-rated aspects of primary care:
Proportion of patients rating each as "very important"



While the Laberge et al report draws attention to the top and bottom ten aspects of care, an alternative approach is to utilize the entire distribution of responses. The median is defined as the midway point separating the highest- and lowest-ranked values. Across all statements in the patient-values survey, the median proportion is 55 percent. In other words, when all statements are ordered from highest to lowest in terms of the proportion of respondents who answered "very important," 28 (or half the statements) showed a proportion higher than 55 percent, while half of the statements had a lower proportion. One approach to analyzing the results is to show the proportion of statements in each category that is in the upper and lower end of the overall distribution. Seventeen of 26 (65.4 percent) statements classified as Communication and Patient Centredness exhibit a proportion higher than the median. Of the 13 statements in the Continuity and Coordination dimension, six (46.7 percent) have a value higher than the median. Four of nine (44.4 percent) Patient Activation and one of eight (12.5 percent) Access statements are in the upper half of the distribution.

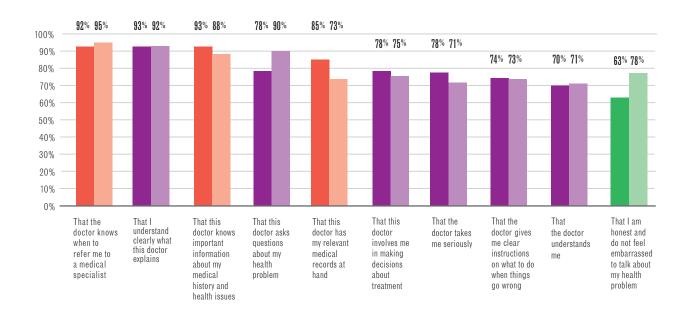
By age group

Figures 2a and 3a both include the responses for individuals of all ages. However, it is plausible that how patients value different aspects of primary care may differ by their age. Figures 2b and 3b display the top- and bottom-rated aspects stratified by those younger than 65 years of age (dark colour bars) and 65 years and older (shaded colour). Although the distribution across the highest-ranked aspects between the age groups shows a similar pattern to when all ages were combined (Figure 2a), a markedly higher proportion of older individuals rated the importance of the "doctor asking about medical problems" and "feeling they can be honest talking about their problems" as very important compared to younger patients. Younger patients felt it was more important that the provider "has relevant medical information on hand" and that providers "take them seriously."

Younger and older patients were more divided in their rating of aspects that were not as important to them. Among aspects rated as least important overall, Figure 3b illustrates that a higher proportion of younger patients rate all aspects of primary care higher than older individuals except one: "the doctor being aware of personal information." The largest discrepancies between the ages are aspects representing the Continuity and Coordination dimension. Forty-four percent of younger respondents felt it is very important that providers share information compared with 19 percent for those 65 and older. Similarly, 24 percent of those in the younger group signified it is very important to be able to see other professionals in the practice, yet only 5 percent of older respondents felt the same.

Figure 2b: The top ten most highly rated aspects of primary care:

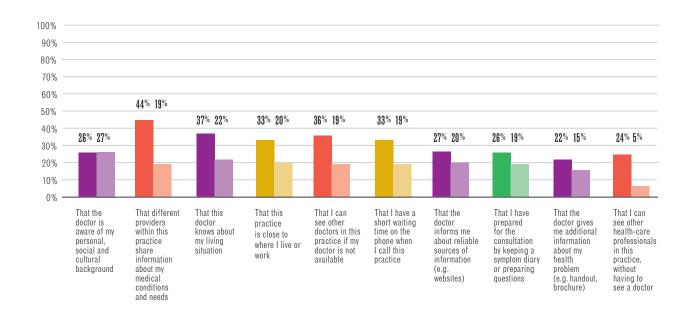
Proportion of patients rating each as "very important" by age group



LEGEND: DIMENSIONS OF PRIMARY CARE

■ Continuity and Coordination (Red); ■ Communication and Patient Centredness (Purple); ■ Patient Activation (Green); ■ Access

Figure 3b: The ten lowest-rated aspects of primary care:
Proportion of patients rating each as "very important" by age group



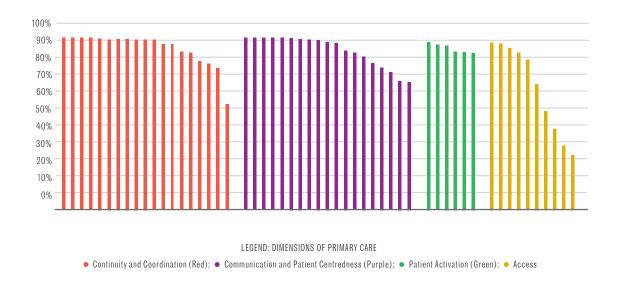
LEGEND: DIMENSIONS OF PRIMARY CARE

• Continuity and Coordination (Red), • Communication and Patient Centredness (Purple); • Patient Activation (Green); • Access

PATIENT-REPORTED EXPERIENCES OF CARE

To evaluate the performance of primary care providers with respect to aspects of health provision that are most important to Nova Scotians, responses from the patient experience of care survey that were able to be matched into one of the four dimensions of primary care were analyzed. It is important to note that not all aspects of primary care included in the patient values survey had a comparable statement to elicit patient experience with that aspect of care. However, all dimensions were represented. Tables A1–A4 in the appendix display all matched questions from the patient-experience survey, along with the proportion of respondents that indicated a positive rating for each. Figure 4 illustrates the proportion of individuals who rated each of the experiences matching to an aspect of primary care positively. Results were grouped by dimension and ordered from highest to lowest within each dimension.

Figure 4: Positive experiences of primary care: Proportion of patients who rated each experience matching an aspect of primary care within each dimension



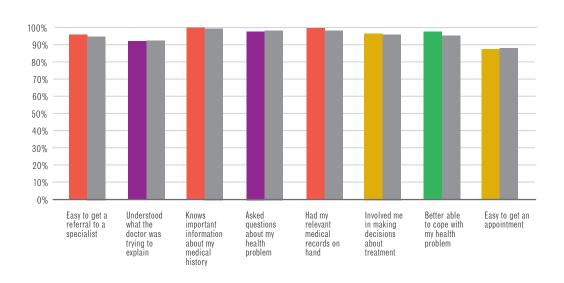
The overall picture suggests that patients are generally satisfied with the primary care they are receiving. Over 90 percent of respondents signified a positive experience for 38 of the 54 elements included. It is clear from the figure that there is an unbalanced number of experience questions across the dimensions. There are 19 Continuity and Coordination questions, 19 Communication and Patient-Centredness questions, ten access¹ questions, and six in the Patient Activation category. The average proportion positive response across all questions in each dimension indicated that Patient Activation had the highest ranking (93.8 percent), and

¹ The proportion that was positive was calculated for all and for those whom considered the appointment "urgent" and are represented by two bars. See Table A3 in the appendix.

Access the lowest (71.1 percent). As shown in Figure 4, the range of values (i.e. difference between the highest and lowest) in the Patient Activation dimension is small compared with the other dimensions. The Access dimension shows a pattern in which the proportion of patients reporting a positive experience falls off quickly from a high of 97 percent to a low of 32 percent. The Continuity and Coordination and Communication and Patient-Centredness categories also show a wide range in the proportion of experience questions answered positively, but not to the same degree.

Figure 5 focuses on patient experiences of care that match to the aspects of primary care most highly rated by patients in NS (as shown in Figure 2a). In order to have all dimensions of primary care represented, the most highly ranked aspects of the Access and Patient-Activation dimensions with a corresponding experience of care question are included. For all questions presented, over 90 percent of respondents reported a positive experience.

Figure 5: A comparison between Nova Scotian and Canadian patient ratings of experience of care associated with the most-highly rated aspects of primary care



LEGEND: DIMENSIONS OF PRIMARY CARE

Nova Scotia (Coloured bars) Canada (Grey bars)

Continuity and Coordination (Red);
 Communication and Patient Centredness (Purple);
 Patient Activation (Green);
 Access

The aspect of primary care valued the highest by patients in NS was the ability to get a referral to a specialist (as shown in Figure 2a). From the experience of care survey, approximately 96 percent reported a positive experience with regard to the ease of seeing a specialist. Nearly all patients felt the provider knew "important information about their medical history" (99.4 percent) and had the relevant information on hand (99.6 percent). Among the eight elements reported in Figure 5, the lowest proportion of patients reporting a positive experience was associated with whether the individual understood what the physician was trying to explain, an aspect of primary care that was ranked as the second highest. In Nova Scotia, 91 percent indicated they felt they could understand what the provider was trying to explain.

Each of the four dimensions of primary care is represented in Figure 5. Three experience questions mapped to the dimension of Coordination and Continuity, three to Communication and Patient Centredness, and one each to Access and Patient Activation. The top two ranked experiences fall under the Continuity and Coordination dimension. Over 99 percent of NS patients rated "the doctor had my relevant medical records on hand" (99.6 percent) and "the doctor knows important information about my medical history" (99.4 percent) highly. Although Patient Activation, Communication and Patient Centredness, and Access fill the third-through-fifth highest spots, there is little difference between the actual proportions of patients who reported a positive experience (97.3, 97.2, and 97.1 percent respectively). What is not illustrated here are the aspects showing the least positive experiences. Of note in this regard is the poor experiences associated with the Access dimension, namely for same and next day appointments, seeing a provider in the evenings or on weekends, and obtaining a home visit.

Figure 5 also highlights the differences between NS and Canada-wide results. The solid bars illustrate proportions for NS and the grey bars are those for all of Canadians as reported in Laberge et(6). Overall, primary care experiences reported by patients at the national level and within NS were similar. Patients within both jurisdictions indicated the highest positive experiences were associated with "the doctor knows important information about my medical history" and "the doctor had relevant records on hand," and the lowest, "could understand what the doctor was trying to explain." Respondents from NS rated six of the eight elements higher than Canadians, and two lower: "I understood what the doctor was explaining" and "the doctor asked questions about my health problems." The experience of care showing the largest difference between the provincial and national results was "it was easy to get an appointment," which was rated higher in NS by three percentage points.

DISCUSSION

Using a random sample of Nova Scotian patients who were attending a family physician, this report presents how aspects of care are both deemed important or valued and experienced. Although the surveys were conducted nationally, we have focused this report on Nova Scotians and the similarities and differences between Nova Scotians and the rest of the Canadian sample.

There was a wide degree of variability in how important individual aspects of primary care were rated by patients in Nova Scotia. They most valued aspects associated with the dimensions of Communication and Patient Centredness, followed by Continuity and Coordination, Patient Activation, and Access. How older and younger age groups rated each aspect was relatively consistent, but some differences were evident.

Experiences of the care received were rated positively by over 90 percent of patients for 73 percent of the aspects of care. Experiences associated with Access to care tended to be rated less positively. This finding is particularly interesting given patients rated the various aspects associated with the Access dimension of primary care as least important, but their experience of this aspect of care was reported to be most wanting.

The proportion of patients in NS who rated the 56 aspects of primary care as very important in the patient-values survey ranged from a high of 93.4 percent to a low of 12.5 percent. Although "that the doctor knows when to refer me to a medical specialist" was viewed as the most important aspect in NS, others across the country did not rate this aspect as highly. Canada-wide, this aspect was ranked as the fourth highest. In 2014, Canadian Medical Association (CMA) statistics indicated NS had the highest number of specialists per capita in the country (130 per 100,000 compared with 110 per 100,000 in Canada [11]). Given that Nova Scotians have the highest or second-highest prevalence of common chronic diseases in the country, the need for specialist access may be higher than elsewhere (17).

Statements related to Communication and Coordination were among the highest-ranked and the lowest-ranked aspects across the distribution. This result was also reflected in the large variation within the category. The Wong and Haggerty framework, upon which the QUALICOPC dimensions were based, used several sources to define primary care dimensions. In that study, Continuity and Coordination questionnaire items were grouped together into a single dimension. Intuitively, however, it is conceivable that survey participants may respond quite differently to "continuity" and "coordination" statements. For example, continuity in a primary care setting

may be interpreted as being seen by a single provider for almost all visits, while coordination can include being seen by multiple providers who correspond frequently with respect to care. A patient may select a provider in a smaller practice who is more likely to see the patient on every visit because that is what is important to that individual. The results of the closer examination of the aspects included in the Continuity and Coordination dimension may be indicative of this. The three statements in this dimension that were in the top five rankings concern the individual primary care provider having accurate knowledge, yet the three included among the least valued involve questions related to multiple providers providing care. Canada-wide results show a similar pattern(6). Grouping individual survey items is crucial to providing an overall picture of a manageable number of primary care dimensions, however, this may result in distinct subdivisions. Evidence from this study suggests it may be beneficial to re-examine the inclusion criteria for the Communication and Coordination dimension and possibly stratify into separate categories.

Assessing which of the four dimensions of primary care is most highly valued is dependent on the measure used. In this report, various methods were presented, such as an overall average, the top ten valued aspects, or the bottom ten. Our preference is to take into consideration the varying number of aspects included to form each dimension before making a statement about what participating NS patients deem as most important to them. By doing so, Nova Scotia patients were found to rank aspects associated with the dimension of Communication and Patient Centredness as most valued, followed by Continuity and Coordination, Patient Activation, and then Access.

Although there was general consistency in the overall pattern of how important younger and older participating patients rated the various aspects of primary care, distinct differences were apparent for some individual aspects. Of the top most-valued aspects, those associated with Continuity and Coordination tended to be more highly valued by those who were younger, whereas those aged 65 years and older rated some aspects of Communication and Patient Activation more highly. This is noteworthy in terms of which aspects of care are more important. Providers can shape the delivery of care to emphasize those aspects that are likely to be of more concern depending on the age of the individual. We wonder perhaps if younger patients have more acute, short, episodic illnesses for which they value continuity for the episode, while those older, with multiple chronic conditions, appreciated being able to talk with their provider and value assistance with their chronic disease self-management (Activation).

Access to primary care is often cited as a concern among Canadians(12) particularly across demographic and economic groups(13,14). Results from QUALICOPC participants for both NS and Canada indicate otherwise. Seven of the eight aspects of care forming the Access dimension were in the lower half of the ranking distribution and two (or 25 percent) were in the bottom ten, including the lowest-ranked overall, "that I can see other health-care professionals in this practice without having to see a doctor." As noted in the Laberge et al report, the conflicting results may be partially due to the population represented in the study. All respondents currently have a primary care provider, so access may be less of an issue. As shown in Table 1, the study population is also older than the population in general, so they may have had longer time to enrol with a provider who meets their needs. Differences in primary care access have also been noted between residents of rural and urban areas(15). Census statistics indicate 43 percent of the population in NS is considered rural (http://www.statcan.gc.ca/tables-tableaux/sum-som/I01/cst01/demo62d-eng.htm). While study results show Access is less of a concern to respondents in NS than other dimensions of care, there are multiple factors that may account for the discrepancy.

Patients in NS reported that primary care providers performed well for aspects of care deemed most important. Over 90 percent of patients reported positive ratings for their experience of care associated with the most highly rated aspects of primary care. Furthermore, a comparison to pan-Canadian results indicates participants in NS rate their experiences higher for six of the eight measures examined. It is encouraging to observe results suggesting providers are meeting patient expectations for aspects of care that are important. Patients perceive physicians do possess relevant medical information and are engaging in two-way communication by supporting patient involvement. The lowest-rated question in the top eight, however, involves comprehension of what the physician is trying to explain. Perhaps there are some who feel the physician is making an effort to communicate clearly, yet difficulties in understanding all the issues remain.

It is interesting that the lowest ratings of experience of care are associated with Access-related aspects of care while at the same time, the Access dimension as a whole was viewed by participating patients as the least important. However, it is important to keep in mind that patients who completed the patient-values survey and rated the importance of each aspect of primary care were not the same individuals who participated in the survey asking about their experience of care. It is difficult to speculate on the implications of this result. In some respects, primary care providers and decision-makers can be less concerned about the weaker performance shown by providers for access to care indicators since it appears not to be valued as highly as other dimensions, at least for those already having a provider. Overall, the importance of contact with primary care providers in terms of better population health is evident in the literature (13,16), suggesting primary care access is vital to effective health-care provision. As health-care systems become increasingly shaped by patient input, it is also necessary to continue to incorporate a broad range of perspectives and policy goals.

LIMITATIONS

The most substantial limitation to this study arises from the representativeness of the sample. Two notions of representativeness need to be considered. The first is whether the survey respondents are representative of all citizens in Nova Scotia seeking primary care, and the second is whether those participating are representative of patients who generally attend primary care family practices in Nova Scotia. Although a survey sample is meant to represent a study population, to ensure results are generalizable to the population as a whole, in this study, participants were selected from patients who were at their family physician's office. These individuals, therefore, not only have a family doctor, but also have been for a visit at least once over the study period. In 2013, an estimated 15.5 percent of Canadians ages 12 and older did not have access to a regular medical doctor(8). Because the QUALICOPC study design links patients to family physicians and practices, it dictates that the sample will not be representative of the overall population that have more variable access to a family doctor. With respect to the representativeness of patients who participated, the study sample was composed of a greater proportion of females and patients older than 55 years than the general population. Age and sex are factors that have been shown to be highly correlated with health and health-care utilization(9). Older individuals are generally more likely to see a family physician due to the associated decline in health status. Females tend to be the greater user of primary care and health services in general, and more likely to respond to surveys than males (10). Because of this, it is likely these survey results reflect the experiences of those most typically experiencing primary care in family physician/primary care offices.

CONCLUSIONS

Understanding patient values is fundamental to implementing effective patient-centred health care. Insights into what aspects are important and whether the system is meeting expectations from the patients' perspective can help care providers and decision-makers develop policy and improve outcomes. For this report, QUALICOPC Canada data for respondents from Nova Scotia were analyzed to determine what aspects of primary care were valued most importantly and how patients rated corresponding experiences. The report structure and methods align with a previous Canada-wide analysis(6) to allow for comparisons between NS and Canadian respondents.

This report suggests Nova Scotian respondents' most highly ranked aspects of primary care were associated with the dimension of Communication and Patient Centredness, followed by Continuity and Coordination, Patient Activation, and then Access.

Experiences with providers were rated positively by over 90 percent of respondents for 38 of 54 aspects of care. Overall, this suggests survey respondents are satisfied with the primary care they are receiving. However, there are some aspects, particularly related to access to care, where there is potentially room for improvement. These include access to visits outside a physician's office and during non-office hour times.

This report is part of the QUALICOPC Canada project, which helps provide an understanding into many aspects of primary care. This unique data source contains information from various perspectives and enables researchers to link individual surveys together for a rich and extensive analysis. There was participation in the project from all provinces allowing for comparisons of results across jurisdictions. Furthermore, the QUALICOPC initiative was carried out in over 30 countries internationally for an even broader perspective. This report has focused on patient values and experiences with respect to primary care in Nova Scotia. It is clear there are many policy-relevant research topics that could be undertaken. Future work by this study's authors will connect physician responses about their primary care practices to patient values and experiences in order to examine associations and further our understanding of which care structures work best.

As this report suggests, Nova Scotians value primary care that puts patients at the centre of care delivery and that providers have been able to meet those expectations. The QUALICOPC project combines input from patients and primary care providers to offer insights into what aspects of primary care are important to patients to help shape policy to improve satisfaction and health outcomes.

REFERENCES

- 1. Epstein RM, Street RL. The Values and Value of Patient-Centered Care. Ann Fam Med. 2011 Mar 1;9(2):100–3.
- 2. Little P, Everitt H, Williamson I, Warner G, Moore M, Gould C, et al. Observational study of effect of patient centredness and positive approach on outcomes of general practice consultations. BMJ. 2001 Oct 20;323(7318):908–11.
- 3. Institute of Medicine. Crossing the Quality Chasm: A New Health System for the 21st Century (2001) [Internet]. [cited 2016 Jan 22]. Available from: http://www.nap.edu/download.php?record_id=10027#
- 4. Hudon C, Fortin M, Haggerty JL, Lambert M, Poitras M-E. Measuring Patients' Perceptions of Patient-Centered Care: A Systematic Review of Tools for Family Medicine. Ann Fam Med. 2011;9(2):155–64.
- 5. Haggerty J, Burge F, Lévesque J-F, Gass D, Pineault R, Beaulieu M-D, et al. Operational Definitions of Attributes of Primary Health Care: Consensus Among Canadian Experts. Ann Fam Med. 2007;5(4):336–44.
- 6. Laberge M, Pang J, Walker K, Wong S, Hogg W, Wodchis W. QUALICOPC (Quality and Costs of Primary Care) Canada. A focus on the aspects of primary care most highly rated by current patients of primary care practices [Internet]. Canadian Foundation for Healthcare Improvement; 2014. Available from: http://www.cfhi-fcass.ca/sf-docs/default-source/reports/qualicopc-e.pdf?sfvrsn=2
- 7. Wong ST, Haggerty J. Measuring Patient Experiences in Primary Health Care. Centre for Health Services and Policy Research; 2013.
- 8. Government of Canada SC. Access to a regular medical doctor, 2013 [Internet]. 2014 [cited 2016 Jan 24]. Available from: http://www.statcan.gc.ca/pub/82-625-x/2014001/article/14013-eng.htm
- 9. Bertakis KD, Azari R, Helms LJ, Callahan EJ, Robbins JA. Gender Differences in the Utilization of Health Care Services. J Fam Pract. 2000 Feb;49(2):147–52.

- 10. Kalmijn M, Liefbroer AC. Nonresponse of Secondary Respondents in Multi-Actor Surveys: Determinants, Consequences, and Possible Remedies. J Fam Issues. 2010 Dec 17;0192513X10390184.
- 11. Canadian Medical Association. Canadian Physician Statistics [Internet]. 2016. Available from: https://www.cma.ca/En/Pages/canadian-physician-statistics.aspx
- 12. Schoen C, Osborn R, Huynh PT, Doty M, Davis K, Zapert K, et al. Primary care and health system performance: Adults' experiences in five countries. Health Aff (Millwood). 2004 Dec;23(6):W4487–503.
- 13. Starfield B, Shi L, Macinko J. Contribution of Primary Care to Health Systems and Health. Milbank Q. 2005 Sep 1;83(3):457–502.
- 14. van Doorslaer E, Masseria C, Koolman X, Group for the OECD Health Equity Research. Inequalities in access to medical care by income in developed countries. Can Med Assoc J. 2006 Jan 17;174(2):177–83.
- 15. Lamarche PA. The experience of primary health care. Can J Rural Med [Internet]. 2010 [cited 2016 Jan 25];15(2). Available from: http://www.facturation.net/multimedia/staticContent/HTML/N0/l2/cjrm/vol-15/issue-2/pdf/pg61.pdf16.
- 16. Kringos DS, Boerma W, Zee J van der, Groenewegen P. Europe's Strong Primary Care Systems Are Linked To Better Population Health But Also To Higher Health Spending. Health Aff (Millwood). 2013 Apr 1;32(4):686–94.
- 17. Statistics Canada. 2013. Canada and Nova Scotia (table). Health Profile. Statistics Canada Catalogue no. 82-228-XWE. Ottawa. Released December 12, 2013. http://www12.statcan.gc.ca/health-sante/82-228/index.cfm?Lang=E (accessed March 31, 2016).

APPENDIX

Table A1 – Continuity and Coordination Experiences

EXPERIENCE QUESTION/STATEMENT	Percent positive rating
The doctor had my relevant records on hand	99.6%
Tests or examinations were NOT repeated unnecessarily	99.4%
I did not feel I got incorrect results	99.4%
The doctor knows important information about my medical history	99.4%
After a hospital visit, my doctor knows about the reason, treatment and results	99.4%
The doctor took sufficient time	99.0%
After an ED visit, my doctor knows about the reason, treatment and results	98.9%
If I visit another doctor at this practice, my own doctor is fully informed	98.9%
When I'm referred, my family doctor informs the specialist about my illness	98.8%
After consultation with a specialist, my family doctor knows the results	98.7%
I did NOT feel I got the wrong meds	98.7%
I can usually see my regular doctor every visit	96.1%
NOT difficult to get a referral to a medical specialist	95.9%
When I'm referred, my family doctor decides to whom I should go	91.7%
If I visit another doctor at this practice, that doctor has sufficient information	91.0%
Different doctors at this practice work together effectively	86.2%
The doctor looked at me when we talked	84.8%
I can see other doctors in practice if my doctor is not available	82.1%
I can see other health professionals in practice without seeing a doctor	61.1%

Table A2 - Communication and Patient Centredness

EXPERIENCE QUESTION/STATEMENT	Percent positive rating
The doctor was polite	100.0%
The doctor listened carefully	99.8%
The doctor/staff did NOT show disrespect because of ethnic background	99.8%
The doctor/staff did NOT show disrespect because of gender	99.8%
The doctor was NOT too concerned about money	99.8%
Other patients were NOT treated better than me	99.6%
People at the practice were polite and helpful	99.1%
I would recommend my (this) doctor to a friend	98.5%
The doctor/staff did NOT act negatively	98.3%
The doctor asked questions about my health problem	97.2%
The doctor involved me in making decisions	96.3%
The doctor knows about my living situation	92.4%
I could understand what the doctor was explaining	91.1%
The doctor can help deal with personal problems	89.2%
I know how to get evening / night / weekend services	85.1%
The doctor from practice spoke to you about current med	82.5%
The doctor from practice spoke to you about how to stay healthy	79.7%
The doctor asked about other possible problems	74.8%
I was informed by practice when due for check-ups	74.0%

Table A3 – Access

EXPERIENCE QUESTION/STATEMENT	Percent positive rating
It was easy to get an appointment for this visit	97.1%
I did not have to wait too long to speak to someone at practice	96.4%
This practice is not too far away from home or work	93.7%
The hours are not too restricted	91.2%
I was able to arrange an appointment with the doctor as soon as I wanted	87.1%
There is a formal agreement/understanding that the doctor is my primary care physician	72.9%
It is not to difficult to see a family doctor from this practice for evenings or weekends	57.3%
I can get a home visit	46.8%
I got this appointment today or yesterday	
All	31.8%
Wanted appointment within days (i.e. more urgent cases)	36.9%

Table A4 - Patient Activation

EXPERIENCE QUESTION/STATEMENT	Percent positive rating
After a visit I can cope better with my health problem	97.3%
Did the person you see most at this practice	
Help you feel confident about your ability to take care of your health?	95.6%
Help you feel that sticking with your treatment would make a difference?	95.2%
Help you feel that your everyday activities such as diet and lifestyle make a difference in your health?	91.9%
Give you a sense of control over your health?	91.4%
Help you feel that you could prevent some health problems?	91.2%

