

Do new and traditional models of primary care differ with regard to access?

Canadian QUALICOPC study

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Abstract

Objective To examine access to primary care in new and traditional models using 2 dimensions of the concept of patient-centred access.

Design An international survey examining the quality and costs of primary health care (the QUALICOPC study) was conducted in 2013 in Canada. This study adopted a descriptive cross-sectional survey method using data from practices across Canada. Each participating practice filled out the Family Physician Survey and the Practice Survey, and patients in each participating practice were asked to complete the Patient Experiences Survey.

Setting All 10 Canadian provinces.

Participants A total of 759 practices and 7172 patients.

Main outcome measures Independent *t* tests were conducted to examine differences between new and traditional models of care in terms of availability and accommodation, and affordability of care.

Results Of the 759 practices, 407 were identified as having new models of care and 352 were identified as traditional. New models of care were distinct with respect to payment structure, opening hours, and having an interdisciplinary work force. Most participating practices were from large cities or suburban areas. There were few differences between new and traditional models of care regarding accessibility and accommodation in primary care. Patients under new models of care reported easier access to other physicians in the same practice, while patients from traditional models reported seeing their regular family physicians more frequently. There was no difference between the new and traditional models of care with regard to affordability of primary care. Patients attending clinics with new models of care reported that their physicians were more involved with them as a whole person than patients attending clinics based on traditional models did.

Conclusion Primary care access issues do not differ strongly between traditional and new models of care; however, patients in the new models of care believed that their physicians were more involved with them as people.

EDITOR'S KEY POINTS

- Access to primary care for patients did not differ between new and traditional models of care. Although there was a statistical difference in physician involvement between the 2 models, with higher involvement among physicians practising in the new model, physicians in both models were highly involved with their patients.
- Practices using new models of care were better at informing their patients about opening hours and where to go when the practice was closed. Patients also reported better access to other health care providers than patients in traditional models of care.
- Patients who attended traditional-model practices had shorter wait times when making appointments and more access to their regular physicians.

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Les modèles de pratique nouveaux et traditionnels diffèrent-ils en termes d'accessibilité aux soins de santé primaires?

L'étude canadienne QUALICOPC

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Résumé

Objectif Vérifier l'accessibilité et le coût des soins de santé primaires prodigués dans des modèles de pratique nouveaux et traditionnels, et ce, en se servant de deux aspects du concept d'accessibilité, centrée sur le patient.

Type d'étude En 2013, une enquête internationale sur la qualité et le coût des soins de santé primaires, l'étude QUALICOPC, a été effectuée au Canada. Il s'agissait d'une étude descriptive transversale à partir de données provenant de cliniques d'un peu partout au Canada. Chaque clinique participante devait répondre à la Family Physician Survey et à la Practice Survey; on demandait également aux clients de chacune des cliniques de répondre à la Patient Experiences Survey.

Contexte Les 10 provinces canadiennes.

Participants Un total de 759 cliniques et de 7172 patients.

Principaux paramètres à l'étude On s'est servi de tests de *t* pour échantillons indépendants pour déterminer si les modèles de pratique traditionnels et nouveaux différaient en termes d'accessibilité, de réponse aux besoins et de coût des soins.

Résultats On a jugé que 407 des 759 cliniques utilisaient un nouveau modèle de pratique contre 352 pour un modèle traditionnel. Les nouveaux modèles se distinguaient en raison de leur structure de paiement, de leurs heures d'ouverture et de la présence d'une équipe multidisciplinaire. La plupart des cliniques participantes desservaient des grandes villes ou des banlieues. On notait très peu de différences entre les modèles de pratique nouveaux et traditionnels pour ce qui est de l'accessibilité et de la réponse aux besoins primaires. Les clients des nouveaux modèles mentionnaient avoir plus facilement accès aux autres médecins de la clinique tandis que ceux des modèles traditionnels disaient voir leur médecin habituel plus souvent. Il n'y avait pas de différence entre les 2 modèles pour ce qui est du coût des soins primaires. Par rapport aux clients des modèles traditionnels de pratique, ceux des modèles nouveaux mentionnaient que leur médecin utilisait davantage l'approche holistique.

POINTS DE REPÈRE DU RÉDACTEUR

- Il n'y avait pas de différence d'accessibilité entre les modèles de pratique nouveaux et traditionnels. Même s'il y avait une différence statistique entre les deux modèles pour ce qui est de la participation des médecins, cette participation était très élevée dans les 2 modèles.
- Les clients des nouveaux modèles de pratique étaient mieux renseignés sur les heures d'ouverture et sur les options disponibles en cas de fermeture. Par rapport à ceux des modèles traditionnels, ils mentionnaient aussi avoir un meilleur accès à d'autres intervenants des soins primaires.
- Les patients des cliniques utilisant le modèle traditionnel obtenaient leur rendez-vous plus rapidement et avaient un meilleur accès à leur médecin habituel.

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Conclusion Pour ce qui est de l'accessibilité aux soins primaires, il y avait peu de différence entre les modèles de pratique nouveaux et traditionnels; toutefois, les clients des nouveaux modèles de pratique estimaient que leur médecin les traitait de façon plus globale.

Primary care (PC) is the most frequent point of contact between patients and the health care system.¹ Over the past decade, PC has undergone substantial changes,^{2,4} but because health care is a provincial jurisdiction in Canada, PC reform varies among provinces.⁵ In some provinces, reformed models of PC have been widely adopted based on new funding models, whereas other regions retain a more traditional model of PC such as fee-for-service (FFS; this category might include group practices) and solo practices.⁶ However, the structures of the new models of care are poorly defined. For example, in Quebec the new models of care are called *family medicine groups*, while in Ontario and New Brunswick they are *family health teams*.^{6,7} Despite the lack of consistency among the various models across the provinces, many reformed models prioritize working collaboratively with other PC physicians or health care providers to enhance integration and coordination of care.⁸

A few studies have compared reformed and traditional models of care; however, it is not clear if one model is perceived more favourably than another by patients or providers. One Canadian study reported that patients in an enhanced FFS model (traditional) had greater access to after-hours care compared with patients in the capitation model (new). Patients in the enhanced FFS model had fewer emergency department visits, but preventive care was not better compared with the capitation model.⁹⁻¹¹ A second Canadian study indicated that family physicians working in the FFS model had lower levels of job satisfaction compared with those working in a capitation model.¹²

Access to PC

A recent study in Slovenia using data from the Quality and Costs of Primary Care (QUALICOPC) survey examined general access to PC and concluded that “universal medical insurance in Slovenia protects most patients from PC inaccessibility.”¹³ Canada also has a universal medical insurance policy (in each province) for PC visits. Therefore, our primary objective was to compare differences in access to PC between traditional and new models across Canada using the QUALICOPC data. We have used 2 dimensions of conceptualization of access to PC: availability and accommodation; and affordability. *Availability and accommodation* is defined as “health services (either the physical space or those working in health care roles) [that] can be reached physically and in a timely manner.”¹⁴ *Affordability* refers to the economic ability of patients to access health care.¹⁴ A secondary objective of the study was to examine whether these 2 models of care influence how patients view the involvement of their PC physicians.

METHODS

The QUALICOPC project is a cross-sectional survey of PC providers and patients in 26 European Union countries.¹⁵

The study uses 4 surveys, based on self-reports: the Family Physician Survey (FPS), the Practice Survey (PS), the Patient Experiences Survey (PES), and the Patient Values Survey.¹⁵⁻¹⁷ In this article, we have used data from 3 of the 4 surveys: the FPS, PS, and PES. The FPS comprised 69 questions assessing various tasks and services (eg, continuity of care, integrated service provision), workload, and payment schedules.^{15,16} The independent variable for the current study (model of care) was derived from the FPS questions. The PS was a brief survey that included 17 questions relating to physical access and the staff organization of the practice. Finally, the PES consisted of 51 items assessing variables such as patient background, distance to the practice, copayments for services, experiences with services of the practice and the physician, and aspects of care coordination.¹⁵

Procedure

In Canada, all 10 provinces collaborated under the coordination of the Canadian Primary Health Care Research and Innovation Network to take part in the study. Data were collected in 2013 and 2014.¹⁶ Each provincial team followed the same surveying method and used the same protocols. All physicians were recruited from organizations that had lists of practising family physicians, such as provincial Chapters of the College of Family Physicians of Canada and the provincial colleges of physicians and surgeons.¹⁶ All procedures were approved by the research ethics boards of the participating institutions of the provincial lead investigators.¹⁶

Physicians received invitations to participate in the study and interested physicians registered either online, by fax, or by regular mail. Participating physicians were instructed to complete the FPS and distribute the PS to a receptionist, the Patient Values Survey to a patient in the waiting room, and the PES to 9 patients in the waiting room. Only 1 physician per practice was eligible to participate in order to capture the highest number of different practices possible and to ensure a more representative picture of each province. Physicians were compensated with \$200 for their efforts in distributing the surveys.

Analytic strategy

One question from the FPS was used to assess whether the participating physicians practised in a new model of care. There were 17 items from the PES and the PS that measured the availability and accommodation dimensions and 5 items from the PES that measured affordability. To examine differences between new and traditional models of care, all analyses were conducted at the practice level. This resulted in the creation of a new aggregated data file that included values reflecting the average patient scores at each practice for each item. Consequently, independent *t* tests were conducted for each item on each dimension, with the model of

practice entered as the independent variable and the access items entered as dependent variables.

In addition, to examine the predictive utility of the access items, a binary logistic regression was conducted using all of the access items that resulted in significant differences between new and traditional models. The access items were entered into the logistic regression as predictor variables and the model of the practice (new vs traditional) was entered as the criterion variable.

To further assess the effectiveness of PC models we analyzed patient's feelings about the level of involvement of their physicians in their care as a proxy of satisfaction. A "physician involvement" scale was created by summing 5 items from the PES. Using these scale scores, an independent *t* test was conducted to examine differences in physician involvement between new- and traditional-model practices.

RESULTS

We identified several variables from the FPS that indicated characteristics of new models of care or PC as described by Muldoon et al.¹⁸ According to Muldoon and colleagues, the most important distinctions between traditional and new models of care are the payment structure and the degree of "teamwork and interdisciplinary collaboration."¹⁸

Seven selected variables were used to confirm whether there were differences between practices that self-identified as using new models of care and those that did not. The results indicated that physicians who identified that they practised under new models of care were significantly different ($P < .01$) from those in traditional model practices on all but 1 of the key variables (Table 1). Differences in continuous variables were analyzed using *t* tests and differences in the dichotomous variables were analyzed using Pearson χ^2 tests for independence. The difference between the new and traditional models of care were strongly related to payment structure, opening hours, and patients' ability to see providers other than their family physicians.

Patient profile and PC use

A total of 7260 patients from 759 practices completed the survey. Overall, 407 practices were identified as having new models of care and 352 were identified as traditional. However, some data were missing in combined FPS and PES files; therefore, 7172 patients from across 10 Canadian provinces were included in the final sample. Based on the PES, the mean (SD) age of the patients was 53.63 (16.48) years. Most patients identified as female (64.7%; $n=4697$), and approximately 85% of the patients reported being born in Canada. Most of the patients reported having "good" to "very good" health. One in 5 reported visiting the practice 5 or more times in the

Table 1. Comparison of new and traditional practice models

PRACTICE CHARACTERISTIC	NEW MODEL (N = 407)	TRADITIONAL MODEL (N = 352)	P VALUE
Proportion of income from capitation payments, mean (SD)	27.94 (36.60)	10.44 (26.09)	<.001
Proportion of income from fee-for-service payments, mean (SD)	25.89 (38.79)	31.17 (41.65)	NS
Clinic is open after 6:00 PM,* mean (SD)	2.52 (1.30)	1.76 (1.25)	<.001
Clinic is open on weekends,* mean (SD)	2.35 (1.45)	1.76 (1.25)	<.001
Physicians meet with other FPs or GPs,† mean (SD)	2.87 (0.40)	2.79 (0.50)	<.01
Physicians meet with nurses,† mean (SD)	2.59 (0.77)	1.96 (0.96)	<.001
Physicians work alone,‡ n (%)	39 (9.6)	89 (25.4)	<.001
Practice uses an electronic medical record,‡ n (%)	298 (73.4)	192 (54.5)	<.001

NS—nonsignificant.

*Measured on a scale of 1 to 4 where no = 1; once per wk = 2; 2 to 3 times per wk = 3; and ≥ 4 times per wk = 4.

†Measured on a scale of 1 to 3 where seldom or never = 1; every 1 to 3 mo = 2; and more than once a mo = 3.

‡N varies owing to missing data.

past 6 months. Most visits were nonurgent in nature, and were most often for referrals, medical letters, or prescription renewals; physical checkups; or doctor-requested follow-up appointments (Table 2).

Practice profile

Responses to the FPS indicated that the province containing the largest number of participating practices was Quebec, followed by Ontario. The province with the smallest number of participating practices was Saskatchewan, followed by Manitoba (Table 3). The average patient panel had slightly more than 2000 patients (mean [SD] 2002.75 [3619.84]). The mean (SD) length of a consultation was 16.50 (6.47) minutes. Most practices were located in large cities or suburbs and less than one-fifth of practices were in rural areas.

Differences in access to PC

Availability and accommodation dimension. There were 17 items from the PES and the PS that were used to measure differences in access to PC between new and traditional models of care by examining the availability and accommodation dimension. Results from the *t* tests revealed that 6 items differed significantly

Table 2. Patient information: N = 7260. Totals might be different owing to missing data.

VARIABLE	N (%)
Self-reported perceived health	
• Very good	1566 (21.6)
• Good	3692 (50.9)
• Fair	1612 (22.2)
• Poor	308 (4.2)
No. of doctor visits in past 6 mo	
• First time	1079 (14.9)
• Once before this visit	1730 (23.8)
• 2-4 times before	2764 (38.1)
• ≥ 5 times before	1480 (20.3)
• Do not know	143 (2.0)
Reason for visit*	
• Ill or did not feel well	1435 (19.8)
• Routine medical checkup or physical examination	1897 (26.1)
• Get repeat prescription, referral, or medical letter	2271 (31.3)
• Second opinion	104 (1.4)
• Doctor requested follow-up	1859 (25.6)
• Other	1203 (16.6)
Urgency of visit	
• Urgent (needed to be seen today)	558 (7.7)
• Somewhat urgent (wanted to be seen today)	1460 (20.1)
• Not that urgent (wanted to be seen within a few days)	2567 (35.4)
• Not urgent	2412 (33.2)

*Participants could select all answers that applied.

($P < .05$) between new and traditional models (Table 4). In particular, patients in traditional-model practices had fewer days between the date on which they scheduled the appointment and the actual consultation, and they could arrange appointments faster and saw their regular doctors more often compared with patients attending new-model practices. However, the patients attending the new-model practices could see other health care providers more easily, and the practices were also better at indicating their opening hours and where to go for health care when the practice was closed compared with traditional-model practices.

Affordability dimension. There were 5 items from the PES that measured aspects of the affordability dimension of access (Table 5). None of the affordability items differed significantly between the 2 types of models, suggesting that the costs and expenses associated with PC were equal between the new and traditional models.

Predicting differences

Results from the binary logistic regression indicated that

Table 3. Practice profile based on new and traditional models of care: N = 759. Totals might be different owing to missing data.

VARIABLE	NEW MODELS, N (%)	TRADITIONAL MODELS, N (%)	TOTAL
Province			
• Ontario	131 (71.6)	52 (28.4)	183
• British Columbia	8 (13.8)	50 (86.2)	58
• Newfoundland and Labrador	0 (0.0)	41 (100.0)	41
• Quebec	149 (69.3)	66 (30.7)	215
• Alberta	89 (83.2)	18 (16.8)	107
• New Brunswick and Prince Edward Island	5 (9.4)	48 (90.6)	53
• Saskatchewan	5 (27.8)	13 (72.2)	18
• Nova Scotia	13 (22.4)	45 (77.6)	58
• Manitoba	7 (29.2)	17 (70.8)	24
Size of city where practice is located			
• Large city or suburbs	194 (55.3)	157 (44.7)	351
• Small town or mixed urban-rural	136 (53.8)	117 (46.2)	253
• Rural	71 (48.3)	76 (51.7)	147

type of model (new vs traditional) produced a significant regression model (model: $\chi^2_8=61.60$; $P < .001$). The following access variables significantly contributed to the model: being able to see other health care providers at the practice (Wald $\chi^2=20.50$, $P < .001$), the number of days between scheduling and the actual appointment (Wald $\chi^2=11.85$, $P = .001$), and being able to see one's doctor at every visit (Wald $\chi^2_1=6.35$, $P < .05$). This model correctly predicted the model of practice (new vs traditional) in 61.1% of the cases. These results suggest that the most important variables distinguishing between new and traditional models were based on 3 questions related to access to other health care professionals, time between calling for an appointment and being seen, and seeing one's own physician.

Differences in physician involvement

Descriptive statistics for the physician involvement scale suggest that, overall, patients perceived their physicians to be fairly involved, as indicated by a mean (SD) score of 5.32 (0.35) (range 4 to 8), with lower scores reflecting greater physician involvement. Results from the independent t test revealed that patients attending new-model practices reported significantly greater involvement of their physicians (mean [SD] 5.29 [0.34]) compared with those attending traditional-model practices (mean [SD] 5.36 [0.37]; $t_{757}=-2.87$; $P < .01$) (Table 6).

Table 4. Comparison of availability and accommodation items in new and traditional models of care

ITEM	NEW MODEL, MEAN (SD)	TRADITIONAL MODEL, MEAN (SD)	df	t	P VALUE	95% CI
Opening hours are clearly indicated outside*	1.32 (0.47)	1.42 (0.49)	741	-2.69	.01	-0.17 to -0.03
How to get care outside of regular hours is clearly indicated outside*	1.66 (0.48)	1.77 (0.42)	728	-3.29	<.001	-0.18 to -0.05
Parking space is available for those with disabilities*	1.89 (0.31)	1.89 (0.32)	752	-0.09	NS	-0.05 to 0.04
Toilets for those with disabilities are available*	1.89 (0.31)	1.88 (0.33)	744	-0.52	NS	-0.06 to 0.03
Wheelchair and stroller accessibility [†]	1.46 (0.59)	1.49 (0.69)	757	-0.58	NS	-0.12 to 0.06
Opening hours are too restricted*	1.95 (0.16)	1.95 (0.15)	747	0.36	NS	-0.02 to 0.03
Home visits are available when needed*	1.76 (0.26)	1.70 (0.30)	711	2.11	NS	0.01 to 0.10
Practice is too far away from where I am living*	1.93 (0.10)	1.94 (0.10)	752	-0.71	NS	-0.02 to 0.01
There is too long of a wait to speak to someone when calling*	1.93 (0.10)	1.94 (0.10)	757	-1.91	NS	-0.03 to 0.00
It is clear how to get evening, night, and weekend services*	1.72 (0.42)	1.66 (0.39)	757	2.03	NS	0.00 to 0.12
It was easy to get an appointment*	1.07 (0.11)	1.06 (0.11)	752	0.71	NS	-0.01 to 0.02
Days waited for this visit from the time the appointment was made*	3.26 (0.66)	3.02 (0.73)	752	4.71	<.001	0.14 to 0.34
Able to arrange an appointment with the doctor as soon as was wanted*	1.18 (0.01)	1.15 (0.01)	754	2.12	<.05	0.00 to 0.05
It is too difficult to see a family doctor from this practice during evening, nights, and weekends*	1.93 (0.36)	1.92 (0.40)	757	-0.40	NS	-0.07 to 0.04
Can see regular doctor every time*	1.21 (0.24)	1.15 (0.22)	757	3.28	<.001	0.02 to 0.09
Can see other doctors in this practice if my regular doctor is not available*	1.50 (0.44)	1.54 (0.45)	757	-1.11	NS	-0.10 to 0.03
Can see other health care professionals in this practice (eg, nurse practitioner, dietitian, pharmacist) without having to see a doctor*	1.85 (0.47)	2.00 (0.45)	757	-4.38	<.001	-0.21 to -0.08

NS—nonsignificant.

*Items rated using the dichotomous response format (yes or no, where yes = 1 and no = 2).

[†]Rated using a 4-point scale from 1 (very easy) to 4 (impossible to access).

*Rated using a 4-point scale from 1 (I made the appointment earlier today) to 4 (I waited more than a week).

Table 5. Affordability dimension between new and traditional models of care: All items rated using the dichotomous response format (yes or no, where yes = 1 and no = 2).

ITEM	NEW MODEL, MEAN (SD)	TRADITIONAL MODEL, MEAN (SD)	df	t	P VALUE	95% CI
Did not take medication because of cost	1.50 (0.46)	1.49 (0.46)	757	0.43	NS	-0.05 to 0.08
Difficult to get health care because had to take time off work	1.80 (0.53)	1.82 (0.52)	757	-0.36	NS	-0.09 to 0.08
Difficult to get health care services because of additional costs (babysitting, parking, etc)	1.57 (0.51)	1.57 (0.49)	757	-0.16	NS	-0.08 to 0.07
Did not take laboratory tests or examinations because of their costs	1.36 (0.45)	1.32 (0.45)	757	1.03	NS	-0.08 to 0.07
Did not get services recommended because of their costs (physiotherapy, psychotherapy, etc)	1.93 (0.59)	1.90 (0.62)	757	0.53	NS	-0.06 to 0.03

NS—nonsignificant.

Table 6. Descriptive information for all items included in the physician involvement scale: All items rated using the dichotomous response format (yes or no, where yes = 1 and no = 2).

ITEM	NEW MODEL, MEAN (SD)	TRADITIONAL MODEL, MEAN (SD)
The doctor involved me in making decisions about treatment or health-related goals	1.04 (0.07)	1.05 (0.08)
The doctor knows important information about my medical history and health issues	1.01 (0.04)	1.02 (0.06)
The doctor knows about my living situation	1.08 (0.14)	1.13 (0.17)
The doctor does not just deal with medical problems but can also help with personal problems and worries	1.12 (0.16)	1.13 (0.17)
After this visit, I feel I can cope better with my health problem or illness than before	1.04 (0.08)	1.04 (0.08)

DISCUSSION

Access to PC is an important component of the health care system and good access to PC continuously translates into better health outcomes for the population.¹⁹ For this study we are confident that, based on the self-reported responses, we measured 2 distinct models of PC that are being offered in Canada for our independent variable—the new and traditional models of care. Using these 2 models of care we examined if access to PC as conceptualized by Levesque et al¹⁴ differed. We examined a number of variables based on the surveys that we categorized as subdimensions of the 2 important access categories: availability and accommodation; and affordability. It was not expected that affordability would be an issue between the 2 models because physician and many laboratory costs in Canada are covered by the provincial universal health care insurer. This is consistent with other studies using the QUALICOPC data in countries with a universal PC funder.¹³

Dimensions related to practice availability and accommodation differ slightly between the 2 models, although the differences are imbedded in the nature of the practice structure. Practices using the new model of care were better at informing their patients about opening hours and where to go when the practice was closed. However, it appears that patients who attended practices that were still working in the traditional model of care had shorter wait times when making appointments. It is no surprise that patients in new models reported better access to

other health care providers, such as nurse practitioners, dietitians, and pharmacists, than patients in traditional models of care did, as new-model practices often include more practitioners than just PC physicians. It is also no surprise that patients in traditional practices had more access to their regular physicians because many of these physicians were solo practitioners.

The literature reports that the differences between the 2 models of care likely do not have a clinical effect on patients' health.¹¹ Although there was a statistical difference in physician involvement between the 2 models, with higher involvement among physicians in the new model, physicians in both models were highly involved with their patients. We speculate that the reason for the difference is related to the funding structure of the new models of care that might allow physicians to spend more time with their patients.²⁰

Limitations

Although the overall uptake of the QUALICOPC survey across Canada was limited, the completion rate of the survey was good.¹⁶ Unfortunately, the survey did not allow us to examine all of the dimensions of the conceptualization of access to PC presented by Levesque et al.¹⁴ This survey is not a representation of all patients, because the survey was conducted among patients who had access to PC. In Canada there are a substantial number of patients who do not have family physicians, which results in not having timely access to PC providers.²¹ Finally, some research suggests that the new models of care, particularly the capitation model, "select" less sick patients.²²

Conclusion

Physicians who practise under the new model of PC were distinct from those who did not. However, this did not translate into better access for patients, although there were some differences between the 2 types of practices. Hence, we can conclude that despite the different models of PC, patients who have PC physicians have similar experiences and report excellent involvement of those physicians. 🌿

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Contributors

Drs Miedema, Boivin, Aubrey-Bassler, Katz, Hogg, Breton, Francoeur, Wong, and Wodchis contributed to the conceptual design for the Canadian QUALICOPC survey, acquiring (provincial) funding and research ethics board approval, assisting with recruitment, implementing the survey, analyzing the data, and writing the manuscript. **Ms Easley** contributed to acquiring the research ethics board certificate, data analysis, and writing the manuscript. **Dr Thompson** contributed to data analysis and writing the manuscript.

Competing interests

None declared

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