Providing continuity of care to a specific population

Attracting new family physicians

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Abstract

Objective To analyze the factors that influence newly licensed family physicians in their decision to provide continuity of care to a specific primary care population.

Design Mixed-methods study that included a self-administered online questionnaire for family physicians followed by individual interviews.

Setting Monteregie, the second-most populated region of Quebec, with rural and urban areas.

Participants All family physicians with 10 or fewer years of work experience who were practising in Monteregie were contacted (366 physicians). Of this group, 118 completed the online questionnaire (response rate of 32.2%). Of the respondents, 10 physicians with varied continuity of care profiles were selected for individual interviews.

Main outcome measures The percentage of work time spent on continuity of care analyzed in conjunction with factors that support or present barriers to continuity of care at the contextual and organizational levels and for family physicians and patients.

Results The main factors that facilitate continuity of care are the physician-patient relationship, interest in clinical continuity of care activities, positive role models, working alongside a nurse, and adequate access to resources, specifically mental health resources. The main barriers are the scope of administrative duties, interest in a comprehensive practice, a negative experience of continuity of care during training, a sense of inadequacy with respect to continuity of care, a heavy case load, and a lack of support in the first years of practice.

Conclusion Possible ways to encourage newly licensed family physicians to provide continuity of care to a specific population are offered. Areas for improvement include medical training, administrative support, and human resources.

EDITOR'S KEY POINTS

- Close to one-third of respondents spent less than one-quarter of their practice time providing continuity of care. Interviews provided a deeper understanding of the actual importance of these factors and the moment when they played an important role, ie, when the initial decision was made to provide continuity of care, at the start of practice, or once in practice.

- Some factors, such as the importance of the physician-patient relationship, the desire for a long-term commitment, and the perception of a burden of responsibility for patients, seem to play a role in the decision to provide continuity of care. Specific medical activities appear to have only a modest effect on the decision to provide continuity of care.

- Better support for primary care would help to persuade newly licensed physicians to provide continuity of care. The creation of access corridors, especially in mental health care, incentives to work on multidisciplinary teams (that include nurses), and electronic medical records are all likely to make this practice attractive.

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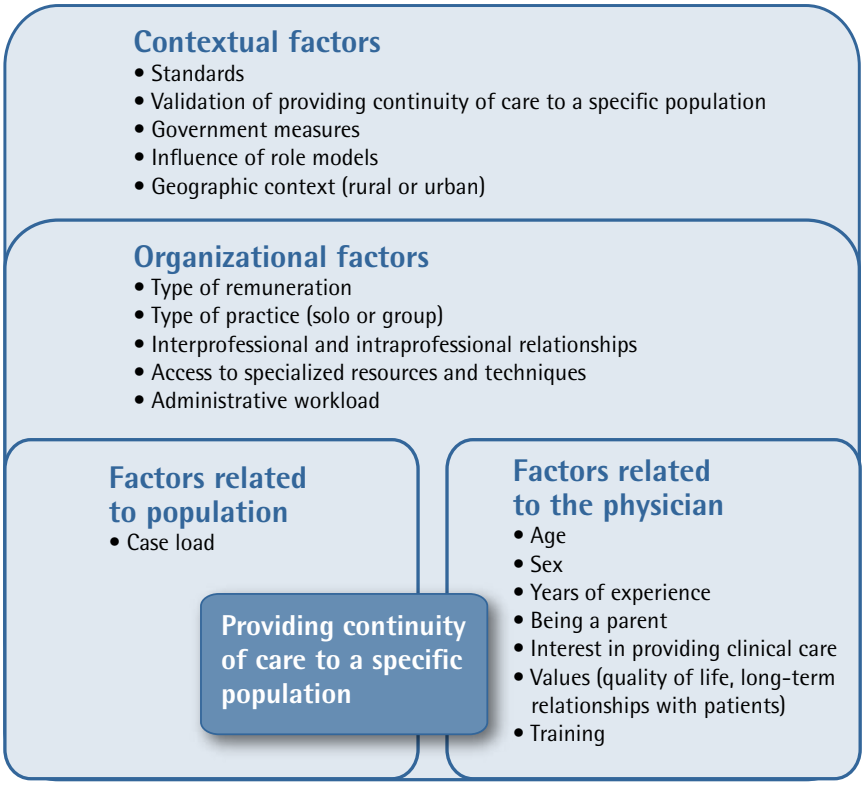
The delivery of strong primary health care results in better public health and fewer inequalities in health.[1] Good primary health care requires a team of professionals in which the family physician plays a key role.[2] One of the objectives for primary care is to provide every member of the public with a family physician; this is because of the health benefits that come with consulting the same physician or a physician at the same clinic.[3,4] In the most recent Commonwealth Fund survey, 22% of Canadians reported that they did not have a family physician; in Quebec, this percentage increases to 28% of residents older than 18 years.[5]

Many factors explain this. In Quebec, the ratio of family physicians to residents is higher than the Canadian average (116 per 100 000 residents, compared with 111 per 100 000 residents[6]). The percentage of family physicians who offer secondary care services has increased from 33% in 2004 to 2005 to 37% in 2010 to 2011.[7] We also note differences in family physician practices based on years of experience. In 2010 to 2011, the percentage of physicians with 10 or fewer years of work experience who delivered secondary care was higher than the percentage of physicians with 20 or more years of experience who delivered this type of care (63% compared with 24%). Thus, more experienced physicians are providing most of the continuity of care, ie, 69% of primary care activities.[8] Quebec is the only province in Canada that requires family physicians to perform specific medical activities (SMAs). This provincial policy requires family physicians with 10 or fewer years of work experience to spend a minimum of 12 hours a week performing an activity that has been deemed a regional priority. The goal of these activities is primarily to meet institutional needs.[9]

Other factors that explain why newly licensed physicians are decreasingly inclined to take on continuity of care include sex, remuneration, the geographic context in which the physician was trained, and his or her value system.[10-13] Some factors, such as the role of primary care nurses and role models, have not been given their due recognition. The objective of this study is to analyze the factors that influence newly licensed family physicians' decisions to provide continuity of care to a specific primary care population in Quebec.

To give structure to the factors likely to influence continuity of care, we developed a conceptual framework that is based on the work of Chaudoir et al[14] and Borgès Da Silva[10] and that comprises 4 categories of interrelated factors (**Figure 1**).

Figure 1. Conceptual framework



Adapted from Borgès Da Silva[10] and Chaudoir et al.[14]

METHODS

The mixed method used for this study consisted of a self-administered online questionnaire and individual, semidirected interviews. The administrative region of Monteregie was selected because it is the second-most populated region in Quebec and offers a range of urban, semiurban, and rural areas. Participants were identified from a list provided by the Département régional de médecine générale de la Montérégie (DRMG) of all of the family physicians practising in the area. The questionnaire was sent out in November 2013 to every physician with 10 or fewer years of work experience (n = 370) by e-mail (n = 239) or, when no e-mail address was provided, by fax (n = 58) or by regular mail (n = 73). The questionnaire contained 34 multiple-choice questions (10 minutes) with the goal of defining the physicians' practice and documenting their perceptions of the factors that affect continuity of care. Providing continuity of care was defined as the act of following up with, and providing primary care to, a specific population over the long term for whom the physician considered himself or herself to be the primary care physician. Descriptive analyses were performed in order to identify the main factors that influenced continuity of care.

The purpose of the second phase of the study was to arrive at a better understanding of the influence of the factors identified in the survey on continuity of care. The interview guide related to the physician's professional path and current practice, listed factors that supported or presented barriers to continuity of care, and recommended ways to attract newly licensed family physicians to providing continuity of care. Because we desired participants with some experience, family physicians who did not provide continuity of care were not interviewed. Participant diversity was sought (ie, diversity of sex, years of experience, time spent on continuity of care, and care settings). Interviews were conducted with 10 physicians providing continuity of care who had agreed to be contacted in the questionnaire. Interviews were conducted face to face for approximately 60 minutes. They were recorded, transcribed, coded, and analyzed by theme using NVivo 10 software. The study was approved by the ethics board of the Centre de recherche de l'Hôpital Charles-Le Moyne.

RESULTS

Profile of respondents

Of the 370 physicians contacted, 4 were ineligible (lived out of province, delay in beginning practice, 10 or more years of work experience) and 118 completed the questionnaire, resulting in a 32.2% response rate. Respondents were compared to all of the physicians who had been contacted, based on the information contained in the DRMG list. Significantly more women and physicians with 5 or fewer years of work experience completed the questionnaire ($P < .05$; **Table 1**).

Respondents spent a mean (SD) of 40.4% (31.8%) of their work time providing continuity of care, although this time varied. One-quarter of respondents (25.4%) did not provide continuity of care; 7.6% of respondents spent less than one-quarter of their time providing continuity of care; and 44.9% spent more than half their time providing continuity of care.

Factors that support or present barriers to providing continuity of care

Survey. Of the 34 questionnaire items, 19 were specifically about the factors that influenced continuity of care; the other items related to characteristics of the physician or his or her current practice. For each of the 19 items, survey respondents were asked to indicate their perception of how factors affected the time they dedicated to providing continuity of care, choosing from the following: strongly encouraged, somewhat encouraged,

Table 1. Comparison of respondents to all of the family physicians contacted

CHARACTERISTICS	FAMILY PHYSICIANS FROM MONTEREGIE WITH ≤ 10 Y OF WORK EXPERIENCE, N (%)*	
	WORK FORCE ACCORDING TO DRMG DATABASE†	SURVEY RESPONDENTS
Sex†		
• Women	269 (74.3)	99 (83.9)
• Men	93 (25.7)	19 (16.1)
Experience†		
• 0-2 y	123 (34.0)	51 (43.2)
• 3-5 y	97 (26.8)	39 (33.1)
• 6-10 y	142 (39.2)	28 (23.7)
Geographic context (according to practice region)§		
• Rural health and social services centre	92 (25.4)	32 (27.1)
• Semiurban health and social services centre	10 (2.8)	2 (1.7)
• Urban health and social services centre	260 (71.8)	84 (71.2)
Total	362 (100.0)	118 (100.0)

DRMG—Département régional de médecine générale de la Montérégie.
*Percentages rounded to 1 decimal place.
†Data were only available for 362 physicians as of December 2013.
‡Results of χ^2 analyses statistically significant at $P < .05$.
§Based on the taxonomy of Borgès Da Silva.[10]

no effect, somewhat discouraged, strongly discouraged, or does not apply. Factors that influence continuity of care are presented in **Table 2**. Factors were ranked in 2 stages. The first ranking was used to determine whether the factor presented a barrier to continuity of care (ie, items that received the most number of somewhat or strongly discouraged responses) or whether it supported continuity of care (ie, items for which most respondents said that they encouraged continuity of care somewhat or strongly). The supporting factors (ie, the sum of the "strongly encouraged" and "strongly discouraged" responses) were then ranked in decreasing order of importance to determine the strength of the effect regardless of its nature. The same ranking process was performed for barriers to providing continuity of care.

Table 2. Factors that support or present a barrier to providing continuity of care from the perspective of the survey respondents

FACTORS	STRONG EFFECT ON PROVIDING CONTINUITY OF CARE, %
Supporting factors	
• Long-term relationship with patients	59.0
• Interest in clinical activities related to providing continuity of care	51.3
• Population needs	50.0
• Caring for patients' health issues	45.3
• Possibility of working in collaboration with nurses	42.6
• Interest in health promotion or prevention	41.0
• Possibility of working in collaboration with other physicians	36.3
• Validation of continuity of care by the general public	30.2
• Sense of competency in providing continuity of care	27.6
• High quality of life associated with providing continuity of care	25.9
• Experiences and interactions with physicians who provide continuity of care (positive or negative role models)	23.3
• Registration fees associated with continuity of care	20.5
Barriers	
• Administrative workload	57.8
• Negative experience providing follow-up care and continuity of care during family medicine residency	33.3
• Limited access to specialized and technical resources	33.9
• Specific medical activities	26.5
• Method of remuneration	21.6
• Validation of providing continuity of care by physicians	18.4
• Validation of providing continuity of care by faculties of medicine	18.1

Bivariate (χ^2) analyses were conducted on these results based on sex, number of years of experience, and percentage of time dedicated to providing continuity of care. These results are presented in a more detailed report.[15]

Individual interviews. Interviews provided an opportunity to explore the main factors identified in the survey in greater depth. Profiles of the 10 interview respondents are presented in **Table 3**. The number of interviews was determined in advance for reasons of feasibility, because the respondents were remunerated from a bank of hours set aside by the DRMG for participation in medical planning activities in the region. With this number, we noted that data saturation was reached for several factors.

The themes addressed were categorized using the conceptual framework. First, we asked an open question regarding the choice of providing continuity of care. Then, more specific questions were asked about the main factors that emerged during the survey (if they had not been spontaneously addressed when the open question was asked). These specific questions were designed to provide a deeper understanding of the effect. This information also made it possible to triangulate the survey results. New factors emerged from the interviews, such as mentoring and interest in hospital practice.

Most physicians interviewed said that having long-term relationships with patients was the basis for their career choice. However, this type of care involves a high level of responsibility that can be a burden on the practice of some physicians:

> What really drew me to continuity of care during my residency was the relationship that I developed with my patients and their families.

> It's very validating to provide ongoing care to patients, especially over a period of years. You get to know them and provide their overall health care. Sometimes, it can be a lot [of] work. The level of responsibility is quite high.

Several physicians said that they enjoyed the pace and variety of continuity of care activities. Several said that a hospital practice enabled them to diversify their activities and made it easier for them to maintain their competencies. Most said they would maintain their hospital

Table 3. Main characteristics of the 10 interview participants

CHARACTERISTICS	FREQUENCY, N
Sex	
• Men	3
• Women	7
Practice setting*	
• Local health community centre	3
• Family medicine group	4
• Family medicine unit	5
• Home care	2
• Private group practice	2
• Rehabilitation centre	1
Percentage of time spent providing continuity of care	
• 25%	2
• 50%	1
• 65%	1
• 75%	5
• 90%	1
Experience	
• 0 y	2
• 2 y	2
• 4 y	1
• 7 y	2
• 8 y	1
• 9 y	1
• 10 y	1
Type of specific medical activities*	
• Mixed (hospitalization and continuity of care for vulnerable populations)	1
• Hospitalization	8
• Emergency	1
• Obstetrics	1

*Categories are not mutually exclusive (respondents could select more than 1).

practices, even without the SMA requirement: "You get to see some acute cases as well … which is really stimulating. If they took away the SMA, I think that I would still keep it up."

Working alongside a nurse to provide continuity of care was viewed as appealing, but financial and organizational barriers stood in the way of adding nurses:

> Of course it would be better to have more nurses … I could probably take on a bigger caseload. But it's not really possible right now, not with the resources that are currently available.

For several respondents, the presence of a multidisciplinary team was an asset to their practices, enabling them to improve care, lighten their workload, and share responsibility for more vulnerable patients, especially those with mental health needs.

> Our patient navigator is super reliable … we can count on her. It's good for women in need, plus it's great because then, when someone is going through a difficult time, it doesn't feel like it's all on our shoulders.

Some respondents believed that the administrative workload was an inherent part of their practices, specifically citing delegation of certain duties (to the administrative assistant or nurse) and electronic files as solutions to the volume of this workload.

> It's not really something that bothers me. It's part of the job, but I don't enjoy it as much as seeing patients. For me, computerization was such an improvement; you don't have to stay so late after hours.

Continuity of care experiences during family medicine residencies varied, as did the effect of these experiences on the physicians' choices.

> It pretty much confirmed that I still liked providing continuity of care.

> During my residency, I thought of it as doing time in the system that didn't relate to what I wanted to do later on. It didn't change my mind because I already knew what I was going to do.

Some suggestions for improving training experiences were made, such as providing care to patients for longer than 6 months, reducing the administrative workload, and increasing the patient mix to develop an interest in providing continuity of care and a sense of competency.

Perceptions of access to specialized and technologic resources varied. An adequate knowledge of resources in the region appeared to be a prerequisite. For several physicians, a lack of access to resources resulted in feelings of isolation, powerlessness, or frustration. According to the respondents, some aspects of working with non–family physician specialists could be improved—in particular, access to phone consultations and knowing wait times. Medical administrative assistants and nurses could play a role in access to laboratories.

> We're here to help. If you start to feel like you're not helping and you're just going around in circles and your patients would be better off hospitalized so that they could get their tests, that doesn't help.

Figure 2. Synthesis of factors that support or present barriers to providing continuity of care

Initial decision to provide continuity of care	Start of practice	Once in practice
Supports • Interest in the physician-patient relationship • Interest in clinical continuity of care activities • Presence of positive role models • Perception of high quality of life	**Supports** • Presence of a mentor • Administrative support	**Supports** • Access to resources and non–family physician specialists • Works with a nurse • Presence of a multidisciplinary team (including mental health professionals)
Barriers • Interest in a hospital practice • Negative training experience (high patient load, inadequate access to resources, high administrative workload) • Not wanting a long-term commitment	**Barriers** • Lack of knowledge of regional resources	**Barriers** • Administrative workload

Figure 2 presents a synthesis of the most important factors, integrating the quantitative and qualitative aspects of the study.

DISCUSSION

The purpose of this study was to analyze the factors that might influence newly licensed family physicians to provide continuity of care. Close to one-third of respondents spent less than one-quarter of their practice time providing continuity of care. Interviews provided a deeper understanding of the actual importance of the most important factors and the moment when they played an important role (ie, when the initial decision was made to provide continuity of care, at the start of practice or once in practice).

Some factors, such as the importance of the physician-patient relationship, the desire for a long-term commitment, and the perception of a burden of responsibility for patients, seem to play a role in the decision to provide continuity of care. This is in line with recent studies.[16-18] The role of experiences during training in developing interest and a sense of competency is also part of the decision to choose a career in medicine.[19] The administrative workload is often cited as a barrier to providing continuity of care.[11] One factor that could be appealing and support the choice to provide continuity of care is mentoring.[20] Specific medical activities appear to have only a modest effect on the decision to provide continuity of care. Other studies are needed to corroborate these results.

Limitations

There are some limitations that could affect the results of this study. Survey respondents might have been more interested in the subject or have had a view of providing continuity of care that differed from nonrespondents, especially because men and physicians with 5 or more years of work experience were underrepresented in our sample. The influence of various factors was measured through the respondents' perceptions and it is possible that respondents overestimated or underestimated their perceptions. Finally, because this study was conducted in Monteregie, it is possible that the results do not accurately reflect the reality of remote and isolated regions of Quebec. However, we believe that the diversity of settings in Monteregie (rural, urban, and semiurban) means that many of the results of the study might apply to Quebec as a whole.

Conclusion

This study shows that better support for primary care would help to persuade newly licensed physicians to provide continuity of care. The creation of access corridors, especially in mental health, incentives to work on multidisciplinary teams (that include a nurse), and electronic medical records are all likely to make this practice attractive. In addition, newly licensed family physicians seem to really enjoy hospital practice. It remains to be seen whether this interest is maintained throughout a physician's career, as this would require anticipating the contribution of other front-line health care professionals in order to meet demand.

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Contributors

All authors contributed to the concept and design of the study; data gathering, analysis, and interpretation; and preparing the manuscript for submission.

Competing interests

None declared

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