

Two new aspects of continuity of care

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Abstract

Objective To determine whether the original continuity of care framework is still applicable to family medicine today.

Design Qualitative descriptive study.

Setting Kingston, Ont.

Participants Three groups of first-year family medicine residents (18 in total), 2 groups of family physicians in established comprehensive practices (9 in total), and 2 groups of family physicians working in episodic care settings (10 in total).

Methods Using focus groups, a semistructured discussion guide, and a qualitative descriptive design, we explored the residents' and practising physicians' conceptions about continuity of care. Qualitative content analysis was used to identify themes.

Main findings Focus group participants consisting of family physicians providing comprehensive care, episodic care physicians, and family medicine residents exposed 2 new dimensions of continuity of care—*community continuity of care* (the physicians' roles in understanding the lives of their patients, and how this affects their overall health) and *continuity of care within the health care team* (the continuity between a patient and members of the interprofessional team, including the family physician). *Geographic continuity of care* (the care of a patient in various settings by the same physician) was not prominently discussed, perhaps reflecting the paucity of family physicians in the hospital setting.

Conclusion Both of these new dimensions of continuity of care are consistent with the ongoing evolution of family medicine as a discipline, and have important implications for how family medicine training programs should be designed to best prepare trainees for future practice.

EDITOR'S KEY POINTS

- The dimensions of continuity of care (*chronologic or longitudinal, informational, geographic, and interpersonal*) were first described in the 1970s. Since then, the discipline of family medicine has evolved considerably, specifically with respect to changes in the physician–patient relationship, advances in information technology, the increasing number and types of available treatments, and changes in practice organization structures.
- Family physicians in comprehensive practices, family physicians practising episodic care, and family medicine residents confirmed the original dimensions of continuity of care by discussing each dimension in depth. *Geographic continuity of care* was not discussed as often as the other dimensions, as fewer family physicians participated in hospital care.
- Two new aspects of continuity—*community continuity of care* and *continuity of care within the health care team*—reflect a deeper understanding of family medicine as a discipline.

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Deux nouveaux aspects de la continuité des soins

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Résumé

Objectif Déterminer si la notion originale de la continuité des soins est toujours applicable à la médecine familiale d'aujourd'hui.

Type d'étude Étude descriptive qualitative.

Contexte Kingston, Ontario.

Participants Trois groupes de résidents en première année de médecine familiale (18 au total), 2 groupes de médecins de famille pratiquant dans des cliniques polyvalentes bien établies (9 au total) et 2 groupes de médecins de famille pratiquant en contexte de soins épisodiques (10 au total).

Méthodes À l'aide de groupes de discussion, d'un guide pour discussions semi-structurées et d'une méthode qualitative descriptive, nous avons vérifié comment les résidents et les médecins en pratique conçoivent la continuité des soins. Une analyse de contenu qualitative a servi à identifier les thèmes.

Principales observations Les participants aux groupes de discussion formés de médecins de famille prodiguant des soins complets, de médecins fournissant des soins épisodiques et de résidents en médecine familiale ont suggéré 2 aspects nouveaux de la continuité des soins – la continuité des soins au niveau communautaire (l'importance pour le médecin de comprendre comment vivent ses patients et comment cela affecte leur santé globale) et la continuité des soins au sein de l'équipe des soins de santé (entre un patient et les membres de l'équipe interprofessionnelle, y compris le médecin de famille). La continuité des soins sur le plan géographique (les soins d'un patient dans différents milieux par le même médecin) n'avait pas été beaucoup discutée, peut-être en raison du peu de médecins de famille œuvrant en milieu hospitalier.

Conclusion Ces deux nouveaux aspects de la continuité des soins sont conformes à l'évolution de la médecine familiale comme discipline et ont des répercussions sur la façon dont les programmes de formation en médecine familiale devraient être conçus pour mieux préparer les résidents à leur pratique future.

POINTS DE REPÈRE DU RÉDACTEUR

- C'est en 1970 que les différents aspects de la continuité des soins (chronologique ou longitudinale, informative, géographique et interpersonnelle) ont été décrits. Depuis lors, la discipline de la médecine familiale a évolué considérablement, spécialement en ce qui concerne les changements dans la relation médecin-patient, les progrès des technologies de l'information, l'accroissement du nombre et des types de traitements disponibles et les changements dans la structure des organismes de pratique.

- Les médecins de famille prodiguant des soins complets, ceux qui prodiguaient des soins épisodiques et les résidents en médecine familiale ont confirmé les aspects originaux de la continuité des soins par des discussions en profondeur sur chacun de ces aspects. La continuité des soins sur le plan géographique n'a pas été discutée aussi souvent que les autres aspects, puisque peu de médecins de famille participaient aux soins hospitaliers.

- Deux nouveaux aspects de la continuité – la continuité des soins au niveau communautaire et la continuité des soins au sein de l'équipe des soins de santé – sont indicateurs d'une compréhension plus profonde de la médecine familiale comme discipline.

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Continuity of care is a core quality of family medicine that improves physician and patient satisfaction and patient outcomes.¹⁻⁵ The concept of continuity of care was first described by Hennen as having 4 domains: *chronologic or longitudinal* (the use of repeated patient observations over time as a diagnostic and management tool), *informational* (the availability of accurate information from one health care encounter to another), *geographic* (care of the patient in a variety of locations), and *interpersonal* (the physician-patient relationship).⁶ Since then, it has expanded to include the dimensions of *interdisciplinary* (the management of several body systems and diseases at the same time) and *family* (knowledge about and understanding of the patient and his or her family) continuity of care.⁷

Since the introduction of this framework in the 1970s, the practice of family medicine has evolved considerably. Changes in the physician-patient relationship, advances in information technology, the increasing number and types of available treatments, and changes in practice organization structures were being noticed in the early 1990s as important influences on the evolution of family medicine as a discipline.⁸ While most family physicians in Canada still practise in comprehensive practices, there is an increasing number who have focused areas of practice (eg, sports medicine, care of the elderly, palliative care, hospital care).⁹ Some argue that there is no longer a single definition of family medicine, as family medicine is better defined as what people who call themselves family physicians do.¹⁰ Despite this shift, family physicians have been, and continue to be, the main source of health care for Ontarians.¹¹

Perhaps the most important recent change in family medicine is the current trend toward group practices and working in multidisciplinary collaborative teams.¹² For example, as of July 30, 2009, in Ontario, there were 693 defined groups of practising family physicians. This represented 7372 physicians caring for more than 9 million Ontarians. Many of these physicians were in family health teams,¹³ which are interdisciplinary teams consisting of doctors, nurses, dietitians, social workers, pharmacists, and other professionals seeking to provide comprehensive, accessible, and coordinated primary health care according to the needs of a particular community.¹⁴ Similar primary care reform is occurring in other Canadian provinces and throughout much of the United States.

Aims

Through focus group discussions with physicians and residents in primary care, we explored perceptions of continuity of care to determine whether Hennen's continuity of care framework⁶ is still applicable to current family medicine practice.

METHODS

We employed focus groups and a qualitative descriptive design to explore the views of residents and practising physicians about continuity of care from the physician's perspective. Focus groups have the advantage of using group interaction to explore ideas, raise questions, share anecdotes, and comment on one another's experiences and points of view, which might lead to a deeper exploration of concepts.¹⁵ A semistructured interview guide was used to explore the concept of continuity of care from the caregivers' perspective.

Setting and participants

Three cohorts of physicians with varying exposure to long-term physician-patient relationships were invited to participate to capture a diverse range of knowledge, experiences, and opinions. The 2 groups with limited exposure to continuity of care were the first-year resident trainees in the Queen's Family Medicine Program in Kingston, Ont, and the family physicians working in emergency departments of nearby towns (more episodic care). Local family physicians with comprehensive, long-standing practices were expected to have maximal exposure to continuity of care. The study received approval from the Queen's University Research Ethics Board.

All first-year family medicine residents in the fall of 2008 were asked to participate by e-mail invitation. Kingston-area family physicians were asked to participate based on their practice types. Convenience samples of family physicians doing episodic care were recruited from nearby emergency departments based on physician availability. These 2 focus groups occurred after departmental meetings. Participants were recruited by the authors, and were initially contacted by e-mail. Willing participants responded by e-mail and were advised of the location and time of the appropriate focus group meeting for their cohort.

Inclusion criteria were being a first-year family medicine resident or a practising physician trained in family medicine in active practice, and competency in English. Participants were not selected on the basis of their demographic characteristics and there were no exclusion criteria.

Interview guide and data collection

The interview guide was developed after the literature was reviewed and consensus was achieved among the research team. During focus groups, the research assistant explained the purpose of the study, obtained informed consent, and used the guide to lead the semistructured interviews.

Focus groups were conducted until no new information or ideas were emerging from the discussions. This

occurred after a total of 7 focus groups. Participants were compensated for their time with an honorarium and a light meal.

Data analysis

The recorded focus group discussions were transcribed and verified by the research assistant. Authors J.R.K. and K.S. conducted independent readings of the transcripts to identify common themes and preliminary codes derived from the data. The codes were refined and tested until themes and patterns emerged. Discrepancies were discussed and consensus was reached. Author D.D. independently reviewed the transcripts and analysis and confirmed the final results. Systematic data analysis and identification of key quotes were performed with NVivo, version 2.0. Disconfirming evidence was investigated.

FINDINGS

Seven 1-hour focus group sessions of 4 to 7 participants were held from May 2007 to February 2009. Two consisted of family physicians in comprehensive family practice (9 participants), 3 of family medicine residents (18 participants), and 2 of emergency physicians who were previously trained in family medicine, but later chose to provide episodic care (10 participants). Of this latter group, all primarily practised emergency medicine, 2 were also Canadian Forces Base physicians, and 1 did some anesthesia work. Demographic data of the groups are summarized in **Table 1**. In general, the episodic care physicians were older than the family medicine residents, but younger than the family physicians.

Participants in this study, when asked open-ended questions about continuity of care, spontaneously described chronologic or longitudinal, informational, interpersonal, and family aspects most frequently. Interdisciplinary care (the management of several body systems and diseases at the same time) and geographic continuity of care (the care of a patient in various settings by the same physician) were rarely mentioned. This held true for all 3 cohorts. Example quotations for each of these aspects of continuity of care are presented in **Table 2**. Quotes from family physicians in comprehensive family practice are identified as *FP*, quotes from family medicine residents are identified as *R*, and quotes from family physicians who provide episodic care are identified as *EC*.

Among the discussions we found 2 new dimensions of continuity of care. The first aspect applies to the community context:

You get to know what is going on ... the family doctor is really part of the community, they knew exactly what was going on in the community and so they

Table 1. Demographic characteristics of focus group participants

CHARACTERISTIC	FAMILY MEDICINE RESIDENTS (N = 18)	FAMILY PHYSICIANS IN COMPREHENSIVE FAMILY PRACTICE (N = 9)	FAMILY PHYSICIANS WHO PROVIDE EPISODIC CARE (N = 10)	TOTALS (N = 37)
Age, y				
• 20-29	14	0	0	14
• 30-39	4	0	6	10
• 40-49	0	4	3	7
• 50-59	0	4	1	5
• ≥60	0	1	0	1
Sex				
• Male	6	3	4	13
• Female	12	6	6	24
Time in practice, y				
• 0	18	0	0	18
• 1-5	0	1	0	1
• 6-10	0	0	5	5
• > 10	0	8	5	13
Setting of practice				
• Rural	NA	3	0	3
• Small city	NA	0	10	10
• City	NA	6	0	6

NA—not applicable.

could sort of touch upon it in clinic as well and sort of know what stressors were bothering people and they would be able to take care of their patients better. They'd know the underlying cause of what was going on. (R)

This was thought to increase a physician's efficacy in understanding not only individual patients, but the community context.

Suddenly it all makes sense. You see somebody who's having a fight with a neighbour and you also see the neighbour [in your practice] so the context is quite broad in a community context. (FP)

There is a higher level implicating yourself into the life of the community where you start seeing patterns emerging in different patients as you get to know them and, therefore, you know what is happening out in the community, so you can see patterns of illness and disease based on where people live and what people do for a living, what industries are in town. (R)

Table 2. Sample quotations for each dimension of continuity of care

DIMENSION	QUOTATIONS*
Chronologic or longitudinal	<ul style="list-style-type: none"> • "You know their history; you don't have to keep asking them the same things over and over again. You also get to follow the progression of the disease." (R) • "It's kind of traveling down their life road as they hit different challenges and life changes." (R)
Informational	<ul style="list-style-type: none"> • "There has to be continuity; there has to be a shared record; there has to be communication. I think that's an important aspect [of continuity of care]." (FP) • "If you don't have continuity of care, at least having a common chart is helpful to you. At least you know their history." (EC)
Interpersonal	<ul style="list-style-type: none"> • "It is connection. It's building a relationship. It's more than just having the medical information." (R) • "A picture is worth a thousand words. Meeting is worth a million; it's a book. There is tone of voice, how they are speaking, the things that are important to them in the conversation." (R) • "I think that [the relationship] is the only thing that's keeping them coming back to that same person. I think this affects their outcomes because you are the steady." (R)
Family	<ul style="list-style-type: none"> • "One of the things that I really like about family medicine is that I took care of this patient as a kid and now they are growing up and they're having kids and I get to take care of their kids and grandkids. You develop a nice rapport with them and a strong foundation. You get to know the whole family." (FP) • "You get to know what the context is behind the whole family that really helps in clinical management, knowing what is best for each family member. And there is a good sense of fulfillment when you see the whole family. You are not just one person's doctor but the doctor for that family unit." (R)
Geographic	<ul style="list-style-type: none"> • "The idea that you don't limit yourself to knowing the patient in just one [setting]. He was so excited you were coming [to do a house call] and we see them in hospital." (FP)
Interdisciplinary	<ul style="list-style-type: none"> • "In some situations people would be seeing a variety of care providers for all of these different things, and you can provide them all to the patient." (FP) • "You are even much better [as a doctor] because you can function as you are meant to, as much as your competence allows you, in gynecology, pediatrics, general medicine." (R)
Community (new dimension)	<ul style="list-style-type: none"> • "You get to know what is going on ... the family doctor is really part of the community, they knew exactly what was going on in the community and so they could sort of touch upon it in clinic as well and sort of know what stressors were bothering people and they would be able to take care of their patients better. They'd know the underlying cause of what was going on." (R) • "A second dimension is the idea of community members in your practice telling you about a patient so finding out additional information that way." (FP) • "There is a higher level implicating yourself into the life of the community where you start seeing patterns emerging in different patients as you get to know them and, therefore, you know what is happening out in the community, so you can see patterns of illness and disease based on where people live and what people do for a living, what industries are in town." (R) • "For me continuity [is] getting to know them and actually getting to that person outside of my doctor-patient relationship. Like I play hockey with them or something and that changes not only how I see my patient, but how they see me." (FP)
Health care team (new dimension)	<ul style="list-style-type: none"> • "Continuity isn't just [about] the one provider, but the continuity of the patient and of all the players." (FP) • "I think it's really important for us to start sharing that relationship and recognizing that [patients] could equally have strong relationships with other members of the team." (FP) • "A new view of continuity of care is that the family physician [is] sort of being like an orchestra conductor [or] quarterback." (R)

*Quotes from family physicians in comprehensive family practice are identified as *FP*, quotes from family medicine residents are identified as *R*, and quotes from family physicians who provide episodic care are identified as *EC*.

These generally positive comments were balanced by suggestions that community continuity of care can lead to a loss of anonymity and boundary issues:

Another negative aspect of continuity of care is in small communities like Kingston, your roster grows

and you start running into people on the streets; there is loss of anonymity; it is awkward meeting people outside of the office because you know a lot about them—they let you in on intimate details of their lives. It [is] difficult to know if you should make eye contact, and again with the difficult patients. They

are the ones who will come up to you in the grocery store and discuss medical problems in [the] grocery aisle. (R)

The other aspect of continuity of care that emerged was the continuity of the relationship the patient has with the health care team; the idea that “continuity isn’t just [about] the one provider, but the continuity of the patient and of all the players.” (FP)

We’ve glorified the unique relationship between a physician and a patient. You have to roster with a physician, that’s the unique relationship and I think it’s really important for us to start sharing that relationship and recognizing that they could equally have strong relationships with other members of the team. Our relationship isn’t unique; it isn’t the ultimate or the supreme relationship, necessarily, they can have. Maybe somebody else is going to [have] the most important relationship. I think it’s important to acknowledge those other relationships. (FP)

Participants made special note of the relationship between patients and nurses in the context of the health care team: “I think [patients] are more attached to the primary nurses.” (R)

Others suggested that the family physician can help coordinate the continuity of the patient’s care with other members of the health care team: “A new view of continuity of care is that the family physician [is] sort of being like an orchestra conductor. I was going to say quarterback. I think it is the same idea.” (R)

Some suggested that physicians practising in groups allowed for improved continuity of care and decreased the number of unnecessary visits to the emergency department:

One of our groups of family physicians here has developed a call coverage, so instead of being a family doctor that, once your office closes or [you] go on vacation, your office is closed, go to the emergency, they have a group—they have an on-call system—that a physician will call the patient and says I will meet you at ... 8:00 or make a decision of what to do. It saves unnecessary trips to the [emergency department]. (EC)

DISCUSSION

Family physicians practising comprehensive care, family medicine residents, and emergency physicians in this study described continuity of care in terms that could be categorized in Hennen’s framework of the dimensions of continuity of care.⁶ In particular, the chronologic or

longitudinal, informational, interpersonal, and family dimensions of continuity of care were referenced by the participants often, and in various contexts (Table 2). The paucity of references to the geographic dimension is interesting. Hennen described this dimension as providing care in different locations as needed by the patient: in the office, in the hospital, and in the home. The move away from hospital practice to primarily office-based practice might account for little discussion of this aspect. Physicians did discuss the option of telephoning patients in hospital, but travel times and parking issues as well as short stays in hospital seem to have decreased the prominence of this dimension.

Two aspects of continuity of care that emerged from the focus group discussions and that appeared to be new were continuity of care within the community and continuity of care with the health care team.

Community continuity of care reflects physicians’ roles in understanding the lives of their patients, and how this affects their overall health. Knowledge of the community in which patients live and work can provide the context through which the care of patients can be enhanced. There is a clear alignment of community continuity of care with the 4 principles of family medicine as described by the College of Family Physicians of Canada.¹⁶

Three different aspects of community continuity permitted improved understanding of the patient and their problems. Insights regarding a patient were gained through community members in the same practice commenting about the patient (similar to family continuity); physicians living in the same community and thereby understanding the social, employment, and cultural issues in that community; and physicians participating in community activities with patients (sports teams, religious groups, etc), allowing them to see other aspects of their patients.

As most medical training takes place in hospitals, this aspect of continuity of care might be difficult for trainees to appreciate. Medical programs are increasingly educating physicians in ambulatory settings, and the rise of distributed programs might help to enhance the understanding of the role of community in health and illness in the population. For example, the family medicine program at Duke University in Durham, NC, is shifting from hospital-based care toward community- and office-based care.¹⁷ Understanding of the benefits of community-based care to the health care system might support the trend of training medical students and family medicine trainees in a community context.

Community continuity was most often mentioned by the doctors working in rural settings. The advantages of practising in such small settings are counterbalanced by the concerns voiced about a loss of anonymity and the

boundary issues that sometimes arise. This issue will need attention as residents develop their skills in navigating these relationships.

The concept of continuity of care with the health care team (the continuity between a patient and other members of an interprofessional team, including a family physician) is highly relevant to the recent organizational changes in Canadian primary care. Family medicine leaders in Canada have recognized that family physicians “need to work more closely in teams—teams that consist of groups of associated family doctors and teams of family doctors working with other closely aligned health care professionals—to provide continuing comprehensive care to patients.”⁹ This idea has been raised before in a managerial context of orchestrating care with specialists.¹⁸ However, this mention of orchestrating care within the primary health care team is new. To do so, family physicians within a health care team need to work with other health care professionals to develop a patient-centred management plan.

Family medicine trainees will need to have exposure to multidisciplinary team settings to be able to work in these settings and negotiate the relationships with both patients and the team of caregivers. For example, specific training would be helpful in such areas as working in a team setting, negotiating differences of opinion with a patient’s care, and allowing other caregivers to take a lead role in the patient’s care.

Limitations

The participants in the study were recruited according to practice characteristics and were not a random sampling of family physicians in the region. The financial incentive might have been a motivating factor to some participants, specifically the residents.

The family physicians providing episodic care attended the focus groups following monthly department meetings, and interest in the department meetings might have affected participation in the focus groups.

The study was carried out in one locale and might represent local conditions. The findings will need to be examined elsewhere to ensure generalizability. Attention should be paid to communities in which more family physicians provide hospital care for patients.


Approximately two-thirds of the focus group participants were women. This might be partly reflected by the fact that there were more female than male family medicine residents at Queen’s University at the time of the study. In addition, one of the local hospitals used was primarily staffed by female emergency physicians.

Despite these limitations, the participants in this study had a range of views and opinions about continuity of care.

Future directions

Given the 2 new dimensions of continuity of care identified, future research is needed to determine effective strategies to help family medicine residents understand how the contributions of community and team-based continuity of care might benefit physicians and patients.

Conclusion

As primary care reform continues, conceptions of continuity of care might change. Family physicians in comprehensive practices, family physicians practising episodic care, and family medicine residents confirmed the original dimensions of continuity of care as described by Hennen. However, geographic continuity of care was not discussed as often, as fewer family physicians participate in hospital care. Two new aspects of continuity—community continuity of care and continuity of care within the health care team—reflect a deeper understanding of family medicine as a discipline. Family medicine training programs might need to consider the learning context and goals of training programs to equip future family physicians with the knowledge, skills, and attitudes to effectively incorporate these dimensions into their future practices. 

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Contributors

Drs Kerr, Schultz, and Delva 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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