UK GPs’ and practice nurses’ views of continuity of care for patients with type 2 diabetes

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Background. Continuity of care is widely regarded as a core value of primary care. Type 2 diabetes is a common chronic disease with major health, social and economic impacts. Primary health care professionals in many countries are involved in the management of patients with type 2 diabetes, but their perspectives on continuity remain neglected in research.

Objective. To explore UK GPs’ and nurses’ experiences of continuity of care for patients with type 2 diabetes in primary care settings.

Methods. Semi-structured individual interviews were conducted with 16 GPs and 18 practice nurses who manage patients with type 2 diabetes recruited from 20 practices with various organizational structures in Leeds, UK.

Results. Three types of continuities were identified: relational continuity from the same health care professional, team continuity from a group of health care professionals and cross-boundary continuity across primary–secondary care settings. Relational continuity was influenced by the quality of the patient–health care professional relationship, policy of the National Health Service (NHS) in the UK (new General Medical Services contract), walk-in centres, the behaviour of receptionists and the structure and systems of the practice. Team and cross-boundary continuities were influenced by the relationship between team members and by effective communication. Relational continuity contributed to more ‘personal care’, but the usual health care professional might know less about diabetes. Team continuity was important in providing ‘physical care’, but patients could be confused by conflicting advice from different professionals. Cross-boundary continuity helps to provide ‘expert advice’, but is dependent upon effective communication.

Conclusion. GPs and practice nurses dealing with patients with type 2 diabetes identified three types of continuities, each influenced by several factors. Relational continuity deals better with psychosocial care while team continuity promotes better physical care; therefore, imposing one type of continuity may inhibit good diabetic care. Cross-boundary continuity between primary and secondary care is fundamental to contemporary diabetic services and ways should be found to achieve more effective communication.

Keywords. Continuity of care, general practice, GPs, practice nurses, type 2 diabetes.

Introduction

Diabetes is a chronic condition with considerable morbidity and mortality. More than 170 million people worldwide had diabetes in 2000, mostly type 2, and they are likely to exceed 360 million by 2030. The UK prevalence of diabetes is increasing and is expected to reach 3 million by 2010. Managing these patients accounts for more than 5% of the UK National Health Service (NHS) expenditure. The challenge is to improve systematically the management of these patients.

Continuity of care has long been regarded as fundamental to primary care and crucial to quality of care. Several studies have shown that continuity powerfully affects patient-focused outcomes, such as

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improving functional status, quality of life and satisfaction in patients with type 2 diabetes. Patients in single-handed or smaller practices who have more chance to see one provider have been shown to be more satisfied than patients in larger group practices. However, no differences were found in diabetic-related complications between smaller and larger group practices.

Continuity is a complex concept because it means several different things; hence, many types of continuities have been identified which are defined in Table 1.

Throughout the world, good-quality primary care improves health outcomes for the population. In many countries, such as Netherlands and US, primary health care team membership is increasing, with more doctors working in larger groups, and fewer lone practitioners and less personal lists. More nurses are involved in managing chronic diseases in the UK and elsewhere, such as US, Canada, Sweden, Italy, Finland and Germany. Advanced Access to care whereby all patients can be seen, if requested, by a practice nurse within 24 hours and a GP within 48 hours is promoted by the UK government. The new General Medical Services (nGMS) contract introduced in the UK in 2004 to improve the quality and range of services provided for patients in primary care now registers patients with the practice rather than the GP. This nGMS contract, through its Quality and Outcomes Framework, introduced target payments for a number of diabetes-related outcomes and measures. Furthermore, from 2006, patients in Netherlands must register with a primary care practice rather than with a physician, as previously. In the US, even with advanced Health Maintenance Organizations, only 30% of patients feel they have a personal primary care physician.

Increasingly, patients with type 2 diabetes consult several health care professionals to manage their disease, giving potential for conflicting advice and incomplete or incorrect clinical records. Where services are not available in primary care, patients may move to secondary care, potentially affecting continuity of care and, hence, quality of diabetic care. The aim of this study was to explore GPs’ and practice nurses’ experiences and perceptions of continuity for patients with type 2 diabetes. Such perspectives of continuity have not previously been explored to inform the provision, structure and organization of diabetic care. This was part of a wider study looking at such continuity of care from several perspectives.

Methods

Recruitment of GPs and practice nurses

Maximum variation purposive sampling was used to recruit GPs and practice nurses working full or part time in different practices (single-handed, groups and operating personal lists) in Leeds, UK. The West Yorkshire Central Services Agency list was used to identify all practices in five Leeds Primary Care Trusts. Practices in the list were grouped according to their structure. Names of GPs in each practice were available from the list; the names of practice nurses who dealt with diabetes were obtained from each practice.

In all, 27 GPs and 25 practice nurses were invited to an interview by letter. Documents included with the letter were a study information sheet, consent form, reply form and prepaid envelope. After 2 weeks, non-responders were telephoned for their decision. A topic guide was developed from the literature for use in the interviews (Table 2). A group of GPs and researchers with a nursing background, who worked at the Centre for Research in Primary Care, University of Leeds, were invited to pilot interviews to check the topic guides for fluency and accuracy. All interviews took place in practice premises and lasted from 45 to 60 minutes. The interviews were conducted by the lead author between January and April 2004; he introduced himself as a researcher, and the purpose of the research and measures to ensure confidentiality were explained. The interviews were tape-recorded and transcribed verbatim.

<table>
<thead>
<tr>
<th>TABLE 1 Definitions of different types of continuities</th>
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<tr>
<td>• Experienced continuity—the patient’s judgement of coordinated and smooth progression of care.</td>
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<tr>
<td>• Relational (personal) continuity—an ongoing therapeutic relationship between a patient and one or more providers.</td>
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<td>• Team continuity—care obtained from a group of health care professionals working in either primary or secondary care settings, providing consistent communication and coordination of care for their patients.</td>
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<td>• Cross-boundary continuity—care that follows the patient across settings (e.g. from general practice to hospital or vice versa).</td>
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<td>• Longitudinal continuity—care from the same health care professional or as few professionals as possible, consistent with other needs.</td>
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<td>• Flexible continuity—services that are flexible and adjusted to the needs of the individual over time.</td>
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<td>• Management continuity—a consistent and coherent approach to the management of a health condition that is responsive to a patient’s changing needs.</td>
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<td>• Geographic continuity—care that is given or received in person on one site (office, home, hospital, etc.).</td>
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<td>• Informational continuity—information transfer that follows the patient.</td>
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*Relational continuity and longitudinal continuity are not easy to distinguish from each other and are therefore often regarded as one type of continuity.*
Data analysis
The Framework approach to analysis, which has been widely used in qualitative research in primary care, was used to analyse data from the interviews; this involves five stages:

- Familiarization with the data
- Creating a thematic framework
- Indexing
- Charting
- Interpretation and analysis.

As the framework highlights the associations between participants, attitudes, perceptions and experiences, it fitted well with the aims of this study. Additionally, it enables predefined themes proposed in the literature (i.e. types of continuities) and the newly emerging findings from data analysis to be compared.

Data analysis was undertaken by MA and validated by PH and BL, but emergent findings were discussed between all authors and refined as an iterative process, preventing any researcher from dominating the analysis.

Results

Characteristics of participants
In all, 16 of 27 invited GPs and 18 of 25 invited practice nurses agreed to participate. Lack of time was the main reason for non-participation of the remainder. Of the 16 GPs who participated, 12 (75%) were male and four (25%) female. Their ages ranged from 27 to 58 years (mean 45 years). Five (31%) were working part time and one full-timer was single-handed. Nurses’ ages ranged from 29 to 60 years (mean 41 years). Thirteen (72%) were part time; two (11%) practice nurses were from single-handed practices. Hence, maximum variation sampling of participants was achieved.

Findings
GPs’ and practices nurses’ experiences of continuity most closely matched three types of continuities outlined in Table 1: relational continuity, team continuity and cross-boundary continuity.

Relational continuity
Many GPs and practice nurses perceived continuity of care as the care provided for the patient by a named
health care professional. The length of this continuity ranged from a few years to the whole lifetime of the patient and should continue whether or not the patient develops chronic disease such as diabetes:

I understand continuity of care that the patient sees a named nurse or a named doctor. (Nurse 18)

To me it [continuity] really means that the same doctor or nurse is seeing that patient over a period hopefully of a lifetime but certainly over a number of years. That’s what I feel continuity really means. (GP 8)

GP and practice nurses identified several elements within the patient–health care professional relationship, such as trust, confidence and good rapport, that improve relational continuity with their patients with type 2 diabetes:

I think people are coming back to see me because they trust me … . (Nurse 19)

I think, the patients like it a lot if they see the same doctor, I think they have more confidence when they see the same doctor. (GP 4)

I think if they [patients] build up a rapport, they want to come back and see you. (Nurse 4)

The elements of trust, confidence and good rapport in relational continuity could encourage patients with type 2 diabetes to believe what the health care professional said; hence, they were more likely to follow advice, particularly about recommended regimens. Furthermore, patients could explore more sensitive issues:

Because you’ve built up that trust and that confidence and I suppose, that is part of your continuity of care, then they [patients] will comply better with your treatment after you’ve built up that trust and confidence because they’re believing what you’re saying is right … you’re building up a rapport and a rapport is they can tell the story. And with diabetes if you’re talking with the male who’s got impotence problems they may feel they can tell … . (Nurse 12)

I think, the patient sort of responds more with continuity, they know they’re going to come back in six months’ time and if they haven’t done what they’ve discussed they were going to do, then they feel a bit guilty perhaps … . (Nurse 4)

GP and practice nurses thought that relational continuity with the same patient gave opportunities to reinforce the same message at each visit and to provide health education knowing the patient was more likely to follow such advice. This subsequently could help to improve the outcome by decreasing the risk of developing diabetic-related complications:

It’s [continuity] making them [patients with diabetes] aware of the problems, the risk factors of diabetes, ensuring that they know that it is a progressive disease, and that it does need to be monitored … . (Nurse 14)

Both GPs and practice nurses considered that receptionists have a crucial role in influencing continuity with the same health care professional by asking the patient which GP or nurse they had recently seen and helping them consult with the same person next time. Because of the importance of this role to promote relational continuity, some GPs suggested that receptionists should be taught about its importance:

I think they [receptionists] know often which patients see which doctor, so they automatically know oh they’re for Dr (X) or Dr (Y) or whatever. So I think the receptionists are good at sort of … making sure the right patient sees the right doctor. (GP 12)

I think if you have new members of staff [receptionists], it’s no point in assuming that they know that when somebody makes an appointment they should see the doctor they’ve just seen. Well we try and teach our receptionists that when a patient comes out of a doctor’s room and says “Can I have another appointment?”, we try and teach them to say “Which doctor did you just see?” so that there is more continuity. (GP 13)

Although GP diabetes specialists provide good care of type 2 diabetes, some GPs thought that they could divert patients away from their usual GP. Furthermore, these patients might receive conflicting advice from the GP and nurse diabetes specialists and the usual GP. To solve the problem of excluding the usual doctor, some GPs suggested that it should be the responsibility of the GP specialist to reinforce continuity by advising patients to consult their usual GP for problems unrelated to diabetes:

It might be more sensible to have a specialist doctor so one doctor sees all the diabetics, but you would lose a little bit of continuity by doing that. You would be seeing your own doctor for routine medical care but you’d have to go and see another doctor for your diabetic care. There might be slight differing opinions between the two doctors that were looking after them as regards management issues and the patient could get confused conflicting advice and this sort of thing. (GP 8)

Sometimes invariably, when they [patients] see the doctor about their diabetes, they will come with another problem and they [GP-specialists] say
“Well actually I’m just here to see your diabetes. For this arthritis or whatever you must go and see your own doctor”. I think they’re [patients] able to say, well, you know, if it’s diabetes it’s that doctor, everything else is this doctor. (GP 4)

GPs felt that the way in which their practices were organized could influence continuity. GPs could sustain continuity more easily with the same health care professional if they were single-handed or operated personal lists. On the other hand, GPs in large group practices without personal lists thought that continuity with the same health care professional was difficult to achieve with large numbers of GPs, practice nurses and other ancillary staff, and with regular staff turnover:

They [patients with type 2 diabetes] have very little option when they register with a single-handed practitioner. They do have to come and see me, that’s one of the good things. (GP 16)

I mean by definition this practice has personal lists ... as we have personal lists continuity as such is guaranteed in this practice. (GP 5)

From the practice point of view we’re a nine partner, so continuity is a difficult problem. If they [patients with type 2 diabetes] want to see a specific general practitioner then they can do that, but it might well take ten days or so to get an appointment with that person. I mean a practice of our size is forever changing, the staff there’s always turnover of doctors, receptionists, nursing staff, so it would be difficult for the patient to maintain contact with one doctor. (GP 9)

For some GPs the opening of walk-in centres and the introduction of the nGMS contract, in which patients are registered with the practice rather than a GP, could affect relational continuity with patients with type 2 diabetes:

I think ... it depends how it’s [the new GMS contract] implemented I guess and how rigid the rules are around it. I mean ..., if they were rigid about them being nebulously registered with the practice rather than individual doctors it would make it quite difficult for us to carry on with our current sort of way of practising with a personal list ... (GP 6)

Both GPs and practice nurses agreed that relational continuity was more crucial in long-term conditions, such as type 2 diabetes, than acute self-limiting conditions. Furthermore, they thought that walk-in centres were better managing acute rather than chronic conditions. In chronic conditions, the patient’s background is important in determining current and future management. Nurses felt that, sometimes, their management of a patient might fail to progress, in which case involvement of other health care professionals might resolve it:

I think walk-in centres are okay for sort of emergency stuff because I don’t think continuity is an issue, but it certainly is with diabetic care, I wouldn’t welcome walk-in centres, I think you’ve got to have some sort of structure for a management plan. (GP 9)

If you’ve got somebody with a sore throat, you might not see them again for over a year, two years, ... they come into the surgery wanting to get better and you can make them better hopefully quite quickly if it’s something that you can treat or you can reassure them, but with diabetes they don’t really get better do they? (Nurse 18)

I’ve had someone in this morning like with a weight problem, and we’re just not getting anywhere, and she’s tried, she’s changed, but we’ve not really got anywhere, and I just think, I need somebody else to see her. (Nurse 15)

Team continuity
Many practice nurses and GPs did not limit their definitions of continuity to the involvement of a single health care professional. They saw continuity with a group of health care professionals working in the same practice. Some nurses included the patient and receptionist as members of this team:

Continuity of care means the patient receives joined up care. It doesn’t necessarily have to be provided by the same person ... the same patient can see any number of doctors. (GP 2)

I understand it [continuity] as a holistic approach to the patient so that the patient, myself, the doctor, the receptionists will all follow on and see them. So that their care is continued just like a circle. (Nurse 4)

Some GPs thought that because diabetes has many different complications, it necessitates a multidisciplinary approach; however, the team should not be too large. Involving many experts might result in better care than the limited experience of a single health care professional:

... So you’ve got [type 2 diabetes] all the kinds of potential complications there as well. You can’t do it on your own; you need separate people with different skills really. I think as GPs we’re a bit of a jack of all trades and we don’t know everything about everything but we know a little bit about, well hopefully we know a little bit about everything. (GP 7)
The team’s everyone, from myself as the sister, general practitioner input, the receptionist input and the patient, everyone forms the team. (Nurse 1)

In order for the team to function well, practice nurses identified the need for good relationships and communication within the team as well as trust and confidence between team members and the patient. The team also requires regular meetings of members to discuss patient management and the future plans:

\[\ldots \text{you've all got to have a good working relationship and you've got to work as a team so that you've all got to respect one another for the different jobs, teach one another, you know you each have to offer within that team, I think that helps [team continuity]. (Nurse 8)}\]

The patient’s gotta have trust and confidence in the staff that they’re seeing. So they’ll come back and they will get continuity of care. (Nurse 3)

I think that is the, of the, first, of the utmost importance is communication \(\ldots\) actually the sort of things which make team continuity strong is getting together and having meetings to discuss a group of patients that you want to go through. (Nurse 4)

Practice nurses also identified the need for consistency in team care, using protocols to deliver the consistent messages to patients with type 2 diabetes:

If we’re all singing the same song, if we’re got the same protocols and we’re giving the same basic advice and we’ve got the same depth of knowledge of what’s going on, it shouldn’t make any difference. (Nurse 12)

Cross-boundary continuity
Continuity was also defined by some respondents as care provided across primary–secondary care settings, which followed patients when they moved from general practice to hospital and back. Services and care provided for patients with type 2 diabetes may be started in general practice and completed at the hospital or vice versa:

I suppose it [continuity] means somebody being seen in the hospital and then coming out to the surgery and continuing the care that was started off, initiated at the hospital. (GP 2)

Continuity of care means if patients have been seen by a consultant, by a diabetic nurse, somebody at the hospital, at the diabetic clinic, that we’re able to continue that service of care \(\ldots\) so it’s mainly to make sure that we have that continuity of care from the hospital \(\ldots\). (Nurse 10)

Some practice nurses identified constraints on providing effective diabetes services at the practice level. Most frequently mentioned was inadequacy of resources, including shortage of essential staff to treat diabetes, such as dieticians, chiropodists, podiatrists and phlebotomists. Shortage of equipment for diabetic care had led to avoidable referral of patients to hospital for investigations:

I don’t think you can have continuity unless you’ve got the resources and the resources, isn’t just the money, it’s having the people there. But that also means you have got to have the financial resources. (Nurse 2)

The advantages [at the hospital] are the equipment that they have there, especially for screening, retinal screening, things like that, is far more superior, we just don’t have that, in the GP surgeries. (Nurse 4)

Both GPs and practice nurses commented that their lack of experience in managing diabetic complications sometimes made them refer patients to hospital. They believed that attending the hospital was important for their patients, particularly for medical rather than psychosocial care. When all these services are provided on a single hospital site it could be more convenient for many patients with type 2 diabetes:

I mean certainly there’s advantages going to the hospital because if people have certain symptoms to do with diabetes that are worrying symptoms. So say if there’s a lot of weight loss or anything, then, you know, the hospitals play a huge part with that. I think that it’s more really on the clinical side rather than on the emotional side of the problems although I think they do try to help with that. (GP 7)

Well in the hospital they’ve got everything in one place, so they’ve got their foot, eyes, doctor and dietician all in the one place, so that’s a lot easier than them going backwards and forwards. (PN 11)

On the other hand, other GPs and practice nurses felt that many patients with type 2 diabetes who were still receiving care from the hospital should be returned to general practice; too often, hospital doctors failed to discharge them. They believed these patients should be encouraged to attend their practice for diabetic care:

I think the other danger is, still happens where juniors see patients who aren’t particularly, who don’t necessarily need to still be coming back, you know, that, type 2 diabetic who’s just always gone to the clinic and they never actually discharge them, even though they’re having in-house sort of GP care as well. (GP 6)

Some of the patients, because they’ve been going up there [hospital] an awful long time, actually
prefer going up there than coming here, just because it’s what they’ve been used to and obviously they get the continuity of care that they like there because that’s what they’ve always known ... I mean I can see the patients say, “Well I’ve seen at the hospital every six months so I don’t need seeing at the surgery.” So the hospital needs to be saying, “Yes you do” you know. (Nurse 17)

As with team continuity, good communication could improve continuity across primary–secondary settings. Some GPs and nurses felt letters from the hospital were often too brief and lacked detail so they had to search for information to support what patients said. If patients attend the practice before the hospital letter has arrived, the GPs or practice nurses cannot update the patient with the hospital’s advice:

I think ... number of times that we have problems purely and simply, it’s not that they’ve been badly treated, mistreated, not diagnosed properly, it’s purely and simply that we just haven’t got the information. We just don’t know what happened and you know, you end up having to chase things up all the time to try and find out why and who did this. (GP 4)

What happens now is they [diabetic patients] go to the diabetic clinic, they come and see me say maybe a week later because they’ve been told that they’ve got to sort their blood pressure tablets out, and I have no information about what was said apart from what the patient tells me. (Nurse 18)

Also, GPs and practice nurses identified some problem in the communication between primary and secondary care merely related to failure to use electronic communication, such as e-mail and same electronic template:

We’re not connected up computer-wise with the hospital, so we’re not communicating well between secondary care and primary care. So it, you know, you get a delay in letters. (Nurse 10)

They should, you know have some sort of agreed template form that is easily transferable or even electronically transferable. (GP 6)

Patient-held records were suggested by a number of practice nurses to improve continuity and to avoid duplication of services between the practice and hospital. However, patient-held records remained the patient’s responsibility and there was the chance that patients might lose, or forget to bring, them:

... like the patient-held records, although they’re sort of quite an old-fashioned thing I think they’re quite good, because it helps us, know what they’re [hospital staff] doing and they know what we’re doing. (Nurse 15)

The disadvantages are that they [diabetic patients] don’t bring it [patient-held records], the patients don’t realize the importance of this and they don’t bring it. (Nurse 17)

Some GPs and practice nurses felt that continuity with the same health care professional was often absent at the hospital because of staff turnover; hence, patients are likely to receive less personal care than if managed in the practice:

The main problem with continuity in hospital of course is that there’s more staff ... consultants cross-refer quite frequently. And also junior staff move around very quickly and this is a constant source of irritation to patients. I think the majority of patients find it very frustrating that they never see the same person more than once. (GP 1)

Well from patients coming back and telling me, they get despondent, they don’t feel that the doctors know about their care, they’re not interested in their care, they come back and say “I don’t like going to the hospital, nobody took any notice of me, they didn’t listen to me and they didn’t change anything, they didn’t do anything.” So, I think patients do sort of feel a little bit disgruntled by hospital care. (Nurse 4)

Discussion

The relative benefits of team and relational continuities on the quality of diabetes care previously have been inconclusive. Our GPs and practice nurses identified team continuity more often than relational continuity as the more appropriate to manage patients with type 2 diabetes. Team continuity has been found to provide good-quality care,28,29 there were fewer short- and long-term complications of diabetes in large practices that implemented a team approach.6 This might indicate that the ‘physical’ care provided by team continuity, rather than ‘personal’ care accruing in relational continuity, plays a role in achieving good glycaemic control. However, practice nurses were concerned that patients will get confused within the context of team continuity, if management is inconsistent. It is damaging to patient confidence if one member of the team, for example, is known to act differently in certain situations.30 Indeed, patients with diabetes have identified the risks of confusion when they consult several team members.24

On the other hand, certain elements in relational continuity (trust, confidence, good communication and good rapport) can make patients adhere better to recommendations, leading to improved glycaemic control.31 Also, the usual health care professional might understand the patients’ views of diabetes better,
influencing self-care and, thereby, improving outcomes.32 However, some GPs and practice nurses in this study were concerned that circumstances promoting relational continuity could impede their developing skills to manage diabetes. A Finnish study showed that, although patients felt better when there was relational continuity, their diabetic control was worse, perhaps because GPs accept less strict diabetic control if their patients feel better.33

Relational continuity is more valued by patients with a chronic problem, such as type 2 diabetes, than patients with acute or minor problems.24 These GPs and nurses thought that patients could more easily explore sensitive issues, such as impotence, perhaps valuing relational continuity more for ‘psychosocial’ than ‘physical’ problems.34,35 However, others have found that patients have difficulty presenting depression, sexual difficulties and mental problems to their usual doctor because of embarrassment and fear of stigmatization.36,37

Providing diabetes care in general practice has several advantages including accessibility, lower cost and less chance of health care professionals losing patients from follow-up than in hospital.38,39 Poor communication with hospitals caused difficulties, which was a source of dissatisfaction in general practice.40 Furthermore, the complexity of hospital structures, shift work and staff rotation could contribute to a lack of relational continuity. Practice nurses suggested several methods to foster cross-boundary continuity. Electronic communication is important to avoid duplication of services.41,42 Exchanging staff between primary and secondary care to increase knowledge in managing diabetes was also suggested. Practice nurses in a previous study asked for more training in diabetes from secondary care.40 A patient-held record was suggested by practice nurses. Such records, in cancer, have not been shown to improve quality of life,43 but it has, however, improved communication in patients with long-term mental illness, without evidence of improvement in quality of care.44

**Strengths and weaknesses of the study**

This was a rigorously conducted qualitative study of a robust sample of health care professionals in one UK city. While it could be argued that the findings are not generalizable to other settings, we believe the converse to be true. The management of diabetes and other chronic diseases is increasingly involving nurses as part of the primary health care teams in many other countries, such as US, Canada, Netherlands, Sweden, Italy, Finland and Germany.16–21,45 We chose to use individual interviews because we were interested in the individual’s experience of continuity and his/her perceptions based upon this; furthermore, it was more convenient for the participants. Expanding the sample to include community nurses and doctors and nurses from secondary care was outside the resources of the current study.

**Implications of findings for practice, policy and research**

We feel that our findings are important and have implications for practice, policy and research. The treatment of type 2 diabetes requires the skills of a multidisciplinary team to provide physical care. However, relational continuity appears important to provide personal care. Health care professionals in the UK and other countries must be aware that vigorously implementing certain types of continuities to manage diabetes may increase the risk of poorer diabetic control. Receptionists have a role in determining some aspects of continuity in primary care; hence, the training of receptionists might be targeted to emphasize the importance of patients seeing their usual health care professional whenever that is possible and appropriate.

Health care professionals should be aware that poor communication between primary and secondary care may impede cross-boundary continuity. Better implementation of technology, such as e-mails, should improve cross-boundary continuity and will be facilitated by implementation of the UK National Programme for IT.46 The NHS changes, such as an increase in group practices, the nGMS contract, more walk-in centres and promoting Advanced Access, might threaten relational continuity. If health care professionals and policymakers wish to preserve continuity as a core value of general practice, they should be aware of the threat to continuity as future policy is developed. Future research is needed to explore the effect of NHS modernization on how patients and health care professionals perceive and experience continuity of care. Furthermore, type 2 diabetes is increasing globally and more primary care physicians and nurses become involved in its managements. Therefore, more research is needed in other countries to explore how health care professionals experience continuity of care in primary care with patients with type 2 diabetes.

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References


24 Aalzari MA. Continuity of care: an exploration in general practice of the views of healthcare professionals and patients with diabetes PhD thesis, School of Medicine, the University of Leeds, UK, 2006.


