# What do we know about patients' perceptions of continuity of care? A meta-synthesis of qualitative studies

SINA WAIBEL $^{\rm I,2}$ , DIANA HENAO $^{\rm I}$ , MARTA-BEATRIZ ALLER $^{\rm I}$ , INGRID VARGAS $^{\rm I}$  AND MARÍA-LUISA VÁZQUEZ $^{\rm I}$ 

<sup>1</sup>Health Policy and Health Services Research Group, Health Policy Research Unit, Consortium for Healthcare and Social Services of Catalonia, Barcelona, Spain, and <sup>2</sup>Department for Paediatrics, Obstetrics and Gynaecology, Preventive Medicine, Universitat Autònoma de Barcelona, Catalonia, Spain

Address reprint requests to: Sina Waibel, Health Policy and Health Services Research Group, Consortium for Healthcare and Social Services of Catalonia, Av. Tibidabo 21, 08022 Barcelona, Spain. E-mail: swaibel@consorci.org

Accepted for publication 29 October 2011

## Abstract

**Objective.** The increasing complexity in healthcare delivery might impede the achievement of continuity of care, being defined as 'one patient experiencing care over time as coherent and linked'. This article aims to improve the knowledge on patients' perceptions of relational (RC), informational (IC) and management continuity (MC) across care levels.

**Design.** A descriptive, qualitative meta-synthesis was conducted based on a literature search in various electronic databases using the subject heading 'continuity of care' and linked key terms. We scanned retrieved articles for adherence to inclusion criteria: (i) relevance to research topic, (ii) original study adopting a qualitative design and (iii) investigating the patient's perspective. Content analysis was conducted by identification of themes and aggregation of findings.

**Results.** The selected 25 studies most frequently investigated RC. Being attended to regularly and over time by one physician (RC) was valued by chronic ill patients, but balanced with convenient access by young patients (MC). Communication and information transfer across care settings as well as the gathering of holistic information about the patient were perceived to foster IC. Critical features for achieving MC were accessibility between care levels, individualized care and a smooth discharge process including the receipt of support. Patients further considered that their personal involvement was one facilitating element of continuity of care.

**Conclusions.** Patients identified elements that enhance or distract from continuity of care across boundaries. Variations in perceived importance seem to depend on both individual and contextual factors which should be taken into account during healthcare provision.

Keywords: continuity of patient care, qualitative research, meta-synthesis, patient-centred care, physician-patient relations, information management

## Introduction

Rapid advances, new treatments, high specialization and shifts in care from institutional to outpatient and home settings mean that patients see an ever-expanding array of different types of providers in a variety of places [1, 2]. That is particularly the case in patients with chronic diseases or pluripathologies who receive care from multiple disciplines [3-5]. Policy-makers and healthcare providers increasingly express concerns about that fragmentation of care [1]. Connecting the care components into a smooth trajectory can be challenging [1]. Continuity of care is purported to be a critical feature in delivering healthcare services [4]. Literature on continuity of care suggests better outcomes when present in healthcare provision, e.g. higher patient satisfaction with medical care [6-9], improved delivery of preventive services [8, 9] and lower hospitalization rates [7-9].

Due to the tendency of segmenting care delivery, the concept of continuity of care has been garnering more attention in the last few years. This has been accompanied by a discussion on clarifying its conceptual boundaries, most lately in Parker *et al.* [10] and Freeman and Hughes [11]. Maybe the widest accepted conceptual framework is that of Reid *et al.*, who define continuity of care as one patient experiencing care over time as coherent and linked [1]; similar to Freeman *et al.*'s description: the experience of a smooth and coordinated progression of care from the

International Journal for Quality in Health Care vol. 24 no. I

<sup>©</sup> The Author 2011. Published by Oxford University Press in association with the International Society for Quality in Health Care; all rights reserved

patients' point of view [12]. Continuity of care embraces two core elements: first, care provided over time and secondly experienced by a single patient [1, 13]. Borders to related concepts may be blurred, e.g. the term 'coordination of care' is sometimes used synonymously, however, reflects the provider's perception and refers to the agreement of all healthcare services in order to achieve a common goal without producing conflicts, and independently on where it takes place [14]. Care is conceived to be integrated when the maximum level of coordination has been reached [15].

In their conceptual framework, Reid et al. [1] classify three types of continuity of care: relational continuity (RC), informational continuity (IC) and management continuity (MC). Each of those can be characterized by several dimensions (Table 1). RC (often used synonymously with personal continuity) refers to the patient's opinion on an ongoing therapeutic relationship with one or more providers that connects care over time [1]. IC is defined as the patient's perception of the availability and use of information on past events and personal circumstances by the physician [13], whereas MC refers to the patient's view about the provision of separate types of health care in ways that they complement each other and are connected in a coherent way for a smooth progression of the patient through the system [1, 16]. Those three types are closely related and may vary in importance depending on patients' characteristics, or the process of care [10], however, an effective healthcare organization has to embody all of them [5].

So far, mostly quantitative meta-analyses focusing on the impact of continuity of care [4, 9, 17] and reviews of qualitative and quantitative studies [10, 18] have been carried out. Qualitative investigation has an important role in evidence-based medicine, in that it represents the human dimensions and experiences of healthcare users [19]. The aim of the paper was to contribute to improving the knowledge on continuity of care based on the review of qualitative studies, trying to respond to the following research questions: what are patient's views on RC, IC and MC across care levels? What is their attributed relevance? What are the causes and consequences of perceived discontinuity?

## Methods

### Study design

We conducted a descriptive meta-synthesis of qualitative published research findings that examined patients'

 Table I Types of continuity of care and their dimensions

Relational continuity (RC)	Informational continuity (IC)	Management continuity (MC)
Consistency of personnel	Information transfer	Consistency of care
Ongoing patient– provider relationship	Accumulated knowledge	Flexibility and accessibility

Source: Adapted from Reid et al. [1].

perceptions and experiences of continuity of care. A metasynthesis can be described as qualitative findings that are themselves interpretive syntheses of data [20]. By drawing on a broader range of participants and descriptions through the combination of findings of qualitative studies, meta-synthesis can yield more powerful results than one study by its own [21].

#### Search strategy and selection process

We undertook a literature search in various electronic databases to minimize the likelihood of excluding relevant studies (Medline, Social Sciences Citation Index and Science Citation Index Expanded). The search strategy included the combination of descriptors and keywords relating to the research area ('continuity of care' or linked key terms that were similar in meaning), qualitative characteristics and the patient's perspective, utilizing the Boolean operator 'AND' (see Fig. 1). After having limited search results to studies published in English, German or Spanish, a total number of 601 different articles was identified until 2009.

Titles, abstracts or retrieved full-text articles were scanned for adherence to the following inclusion criteria: (i) relevance to the research topic (explicitly or implicitly analysing RC, IC or MC), (ii) original studies that adopted a qualitative design and (iii) investigating the patient's perspective. Twenty-three studies met the inclusion criteria and were retrieved for further analysis. No additional article was identified through hand searching of the bibliographies of the final selected studies; however, two further articles were included by using the Internet search tool of the Reference Manager Version 11 for finding more relevant studies linked to the selected ones. We considered that all 25 articles applied a rigorous methodology in the recruitment process, data collection and analysis according to Mays and Pope's [22] criteria of validity. We applied triangulation of researchers in cases of uncertainty if the study: (i) responded to our research purpose and (ii) applied sufficient techniques and tools to strengthen rigour [23].

#### Data analysis

Findings were separated by each type and dimension of continuity, according to the theoretical framework by Reid *et al.* [1]. We largely followed the classic method of Noblit and Hare [24] for the analytic process that began with a first reading of the studies and was completed with the creation of a grid of key concepts. The findings were juxtaposed to identify homogeneity and discordance of themes, and then aggregated. That method required the preservation of meaning from the original study as far as possible. The identification of new themes or categories was a further procedure used in the content analysis. The final synthesis needed to convey explicitly how the whole was greater than the sum of the constituent parts [24, 25].

The content analysis was guided by the following outcome dimensions: (i) the patient's understanding of each continuity

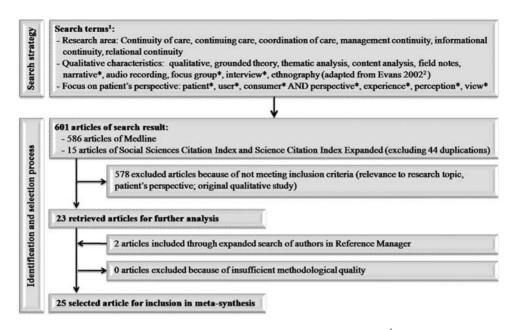


Figure 1 Flow chart of search strategy, identification and selection process of articles. <sup>1</sup>Search terms were combined by the Boolean operator 'AND', <sup>2</sup>Evans [19].

dimension, including its definition and perceived influencing factors; (ii) the relevance attributed to each dimension and (iii) perception of causes and consequences when this dimension was deficient or absent.

## Results

Twenty-five studies published from 1999 through 2009 met the established selection criteria and were kept for the final analysis. Sixteen studies were conducted in the UK, the others in Australia, Belgium, Canada, Sweden and the USA. The two most common data collection techniques were (semistructured) in-depth interviews (17 articles) and focus groups (8 articles). Four studies employed two or more qualitative data collection techniques and one combined qualitative with quantitative research. The study setting ranged from primary and secondary to home care with a predominance of evaluation of the primary care setting. In 16 articles, the study population suffered from chronic conditions (5 studies on type II diabetes, 3 on mental illnesses and 8 on different chronic pathologies), whereas the remaining 9 studies did not focus on a specific disease. The synthesis revealed that 14 articles studied implicitly or explicitly (stated within their objective) all three types of continuity of care, 5 studies focused on RC solely (in total 24 articles studied RC), one on MC and the rest on a combination of two types. Eighteen studies examined more than one level of healthcare; therefore spanned the continuum of healthcare. Table 2 illustrates the characteristics of the articles that were included in the meta-synthesis.

Results are separated by each type of continuity of care (RC, IC and MC), followed by two sections on emerging concepts (personal self-responsibility and interdependency of continuity of care). Table 3 summarizes the results of identified elements that enhance each type of continuity across care levels from the patient's perspective.

#### **Relational continuity**

Reid *et al.* [1] divided RC into patients' perception of (i) 'consistency of personnel' that refers to seeing the same caregivers even in settings where there is little expectation of establishing long-term relationships and (ii) an 'ongoing patient-provider relationship', that can be defined as an established relationship between a physician and a patient that extends across illnesses over time.

Consistency of personnel balanced with convenient access. Patients referred to consistency of personnel when they were seen regularly [26, 27] and over time [28–30] by a named physician or a practice nurse in primary and secondary care [26, 27] or a small team of physician [28]. Regularity in seeing the same general practitioner (GP) was not experienced to define RC in those cases where patients regularly saw the same GP [31].

Regarding its relevance, patients emphasized on the importance of experiencing a continuing relationship over time [26, 27, 29, 32-34] with the same GP [29, 30] or a small team of physicians, particularly when a primary provider delivered most of the services [28]. Consistency was particularly important for patients with chronic health problems [26, 33], the elderly, young parents [31] and terminally ill patients receiving home care [35]. Patients with a serious mental health problem preferred to see their GPs over the opportunity to consult a different physician with special

Table 2 Characteristics of retrieved articles

Article	Location	Data collection technique	Sample size	Healthcare setting	Study population	Type of continuity studied	Continuity among different levels of healthcare	
							Yes	No
Alazri et al. [27]	UK	Focus groups	79	Primary care	Patients with type 2 diabetes	RC, IC	x	
Boulton et al. [31]	UK	In-depth interviews, review of practice records	31	Primary care	Users of primary care services	RC, IC, MC		х
Campbell et al. [46]	UK	In-depth interviews	16	Primary care	Patients with common chronic mild-to-moderate mental health problems	RC, IC, MC	х	
Cowie et al. [36]	UK	In-depth interviews	33	Primary care	Patients with chronic conditions	RC, IC, MC	х	
Green et al. [47]	USA	In-depth interviews, questionnaires	177	Integrated healthcare organization	Patients with mental disorders	RC		X
Guthrie and Wyke [34]	UK	In-depth interviews	48	Primary care	Users of primary care services (32); patients with non-chronic diseases, hypertension or diabetes; GPs (16)	RC, MC		x
Harrison and Verhoef	UK	In-depth interviews	33	Secondary care, home	Patients who experienced transition from an acute care hospital	RC, MC	х	
[45]		-		care	into the community with home care support	<b>DO TO 160</b>		
Infante et al. [26]	UK, Australia	Focus groups	76	Consumer organisations and others	Patients with chronic conditions	RC, IC, MC	х	
Jones et al. [37]	UK	In-depth interviews	45	Mental health service	Patients with psychotic and non-psychotic disorder (31), their carers (14)	RC, IC, MC	х	
Lester et al. [29]	UK	Focus groups	92	Primary care	Patients with serious mental illness (45), GPs (39), practice nurses (8)	MC	х	
McCormack et al. [42]	UK	In-depth interviews, real-time tracking, consensus conferencing	60	Primary and secondary care	Inpatients over 65 years of age	RC, IC, MC	х	
Mercer et al. [32]	UK	Focus groups	72	Primary care	Users of primary care living in an area of high socio-economic deprivation	RC		х
Michiels et al. [35]	Belgium	In-depth interviews	22	Primary care	Terminally ill patients (17), next of kin (5)	RC, IC	x	
Nair et al. [39]	Canada	Focus groups	46	Health service organization	Patients with diabetes	RC, IC, MC	х	
Naithani, Gulliford, Morgan [38]	UK	In-depth interviews	25	Primary care	Patients with type 2 diabetes	RC, IC, MC	х	
Nazareth <i>et al.</i> [51]	UK	In-depth interviews	28	Primary and secondary care	Patients with breast or colorectal cancer (7); relative or friend and health professionals (21)	RC, IC, MC	х	
O'Cathain et al. [40]	UK	In-depth interviews, focus groups	60	Emergency and urgent care system	Users of the emergency and urgent care system	RC, MC	х	
Pandhi et al. [49]	USA	In-depth interviews	14	Primary care	Users of primary care	RC		x
Pooley et al. [41]	UK	In-depth interviews	47	Mainly primary care	Patients with type 2 diabetes and over 50 years of age (9), health professionals (38)	RC	х	
Preston et al. [16]	UK	Focus groups, in-depth interviews	38	Primary and secondary care	Patients (33) who attended an outpatient appointment or had been an inpatient; carers (8)	RC, IC, MC	х	
Von Bültzingslöwen et al. [44]	Sweden	In-depth interviews	30	Primary care	Patients with chronic conditions (14), health professionals (16)	RC		х
Williams [43]	Australia	In-depth interviews	12	Home care	Patients with comorbidities who required an acute hospital stay	RC, IC, MC	х	
Woodward <i>et al.</i> [28]	Canada	In-depth interviews	62	Home care	Home care clients (25), case managers (13), home service providers (19), caregivers (5), health professionals (3)	RC, IC, MC		х
Wong et al. [30]	Canada	Focus groups	75	Primary care	Patients with chronic diseases	RC, IC, MC	x	
Wong and Regan [33]	Canada	Focus groups	50	Primary care	Patients with chronic conditions living in rural communities	RC, IC, MC	X	

Contin	uity of care					
Types	Dimensions	Facilitating elements				
RC	Consistency of personnel	Being attended by the same physician, practice nurse or a small team of physicians in primary, secondary or home care Continuing relationship over time Regularity of visits (to check progress)				
	Ongoing patient-provider relationship	Quality of visits (to check progress) Quality of consultation (attentiveness, inspiration of confidence, medical knowledge, etc.) Avoidance of 'overfamiliarity' or seeing a physician too frequently Take over of responsibility and coordination of care by a professional (usually by the GP)				
IC	Information transfer	Consistent cross-boundary and inter-hospital communication; exchange of clinical information				
	Accumulated knowledge	Access to medical records by professionals in different settings Gathering of 'holistic' information (values, preferences, support mechanism and social contexts)				
МС	Consistency of care	Receipt of support and preparation for the discharge process Physician's company of patient to others settings Consistency of timing of home care delivery Organization of transfers and coordination of home care by the GP				
	Accessibility	Availability of a usual doctor or nurse when needed Receipt of advice and having medical tests done when required Provision of services that are regular, timely and efficient Delivered services and providers are at the same location				
	Flexibility	Implementation of structured reviews of care Immediate response to care needs Adjustment of care to patients' needs (individualized care)				

Table 3 How would patients improve continuity of care in practice? Facilitating elements of continuity of care

Source: Author's own elaboration; conceptual framework based on Reid et al. [1].

expertise in that field [29]. Patients receiving home care reported the greatest satisfaction with service delivery when there was a high consistency of personnel [28]. Seeing their GPs regularly to check the progress was appreciated by patients with chronic conditions even when they were not feeling sick [26]. In contrast, that dimension was less valued by a cluster of patients or in special circumstances [27, 31, 36], e.g. by patients with multiple long-term conditions, who considered that several professionals know them equally well [36]. Young and employed patients with a minor, acute health problem preferred convenient access, although achieved at the cost of seeing different healthcare professionals [31]. In urgent cases, an immediate intervention became a priority for patients with diabetes or other longterm conditions [27, 36].

Patients with chronic illnesses suggested that large practices (medical centres) distracted from consistency of personnel due to a higher turnover of GPs [26]. When consistency was absent, patients expressed dissatisfaction [31], feelings of helplessness and isolation [37], as well as confusion by receiving different treatment and medical advice [27].

Affiliation and responsibility in an ongoing relationship. Results suggest that consistency of personnel positively influenced the physician-patient relationship towards establishing a sense of affiliation and higher quality of consultations [27, 32-35], e.g. an ongoing relationship enhanced mutual understanding [35], was seen to be necessary in order to 'feel comfortable' [27, 33, 34] or to develop a 'genuine relationship' (referring to the feeling of being valued or able to express concerns) [32]. Patients highlighted facilitating factors, e.g. their physician was prepared to listen [38], attentive to their needs, knowledgeable [39] or inspired confidence [27, 38] to address embarrassing problems [27].

The take over of responsibility and care coordination by a professional were perceived to be relevant aspects in an established relationship [26, 30, 39, 40], e.g. by elderly people or patients with chronic conditions who lived in rural communities [30]. A personal GP appeared to be a central catalyst in ensuring continuity for diabetics [39], a care coordinator for chronic ill patients [26] and a key professional of the emergency and urgent care system [40]. The physician's familiarity with the patient's circumstances-more common in a continuous relationship-was valued by patients since that created more time to deal with patients' concerns effectively [41]. On the other hand, 'overfamiliarity' [27] or seeing the same physician too frequently could lead to missed diagnosis [27, 32] or fed beliefs that the physician could become complacent with the patient's problems [26, 32] so that his or her concerns were no longer taken seriously [32]. As a result, some patients preferred to consult a different GP in order to receive a new perspective or a second opinion [26, 27], situating them in a better position to compare physicians' performances and to reach a judgement about quality of care [32].

When a strong relationship with a primary carer was absent, older people experienced a feeling of vulnerability [42]. Some patients with diabetes believed that their GPs might lose interest, once they were referred to secondary care [26]. Moreover, they felt poorly involved in the consultation and less satisfied when a personal relationship was absent [38].

#### Informational continuity

According to Reid *et al.*, IC consists of two dimensions: (i) 'information transfer' which refers to the patient's perception on exchange of medical information between different providers and organisations and (ii) 'accumulated knowledge' that is the patient's opinion about the professional's knowledge on medical and non-medical information (including values, preferences and social contexts) [1].

High expectations on communication and information transfer. Components that were associated with information transfer were communication [38, 40] in the context of an 'ongoing and consistent exchange of information with healthcare providers [38] as well as interaction between physicians [39, 40] which should take place across care levels [27] and between hospitals [40]. Patients considered that information technology that is accessible at any point of care [30] as well as health records maintained IC, particularly in cases where patients were attended to by different health professionals [40]. As a consequence, patients were spared from unnecessarily repeating information or tests, resulting in more efficient use of everyone's time [30, 39, 40].

Communication among care levels was highly valued by patients in general [30, 39, 40], e.g. all patients with diabetes mentioned information exchange to be a crucial component of IC [39]. Terminally ill patients expected from their GPs to exchange information with specialists regarding their health situation, treatment options and care facilities [35]. Patients with diabetes appreciated accessibility of medical records by the whole medical staff since that enabled them to consult any available GP [27].

Patients from various studies identified gaps in communication and information transfer among different levels of care [16, 30, 36, 40, 43], e.g. patients with comorbidities perceived that specialists did not interact with their colleagues. Consequently, health problems might not be sorted out [43]. The receipt of conflicting information from different care providers prevented patients from making progress, resulting in reduced confidence in professionals, increasing anxiety and feelings of not being valued as individuals [16]. Patients with chronic conditions became frustrated when they repeatedly had to explain their antecedents to short-term locum doctors, who had not informed themselves in advance [44].

Accumulated knowledge of holistic information. Results show scarce information about patients' understanding of accumulated knowledge. In general, patients expected from their GPs to gather 'holistic' information, instead of sole biomedical or problem-related data. Holistic information included their values and preferences, support mechanisms and social contexts [35, 44].

#### **Management continuity**

Reid *et al.* [1] identified two dimensions of MC: (i) 'consistency of care' refers to the patient's perception that a planned care pathway ensures continuity of treatment; and (ii) 'flexibility' that adapts care to changes in an individual's needs and circumstances, and therefore emphasizes on individualized care plans. The emphasis on provider maintaining contact with patients, monitoring their progress and facilitating access to needed services has led to the inclusion of 'accessibility' in mental health literature in the conceptual framework of MC [1, 13]. MC is prominent in discharge planning literature on continuity of care, since the transition from one setting to another is a common breaking point [1].

Consistency of care and a smooth discharge process. The synthesis suggests that existent studies rather emphasized on a smooth discharge process [26, 35, 43] than on an overall care pathway which refers to Reid *et al.*'s definition [1]. Therefore, a general explanation of what comprises 'consistency of care' was not found in the selected articles. A successful discharge was defined by patients as 'being able to function well in their home environment after the transition', including the receipt of support and preparation for the transition process. Care was perceived to be coordinated when providers (e.g. home care coordinators) accompanied patients to other settings (e.g. to the hospital) [45]. Patients receiving home care mentioned 'consistent timing of service delivery' to be an element of service provision that supported the achievement of consistency of care [28].

Regarding its relevance, some terminally ill patients valued that their GPs organized transfers and coordinated home care [35]. Keeping continuity of services going long term after discharge was an issue for many older people, who expressed concerns about receiving sole temporary home care [42]. There was no data found regarding causes and consequences of inconsistency of care.

Accessing healthcare services flexibly. Selected studies showed scarce information about the patient's understanding regarding flexibility, apart from individualized or tailored care [28, 34, 39, 46]. In contrast, accessibility was better contextualized by being studied more frequently, although not always explicitly, e.g. getting advice when required—a patient-derived theme of access—was assigned to flexibility [38]. According to diabetics, accessibility was enhanced when first healthcare services were provided timely and regularly [39]; secondly, the patient was able to access a usual doctor, a nurse [38] or a specialist when needed [39] and thirdly most of their healthcare providers were at the same location [39]. Patients with mental illnesses considered that structured reviews (e.g. an annual check-up based on a register of patients) [29] and the receipt of more information and support [37] facilitated access to healthcare services.

Easy access and immediate response were especially valued by a cluster of patients in some circumstances, e.g. by diabetics since care needs varied and changed over time [38] (see 'consistency of personnel balanced with convenient access'). Regarding flexibility, patients appreciated the provision of individualized care [28, 34, 39, 46], as opposed to receiving treatment by physicians who were just acting upon a single event or diagnosis, simply treating symptoms or neglecting the social element of care [46].

Patients with diabetes believed that long waiting times, shortage of healthcare providers as well as delayed, cancelled or not predictable appointments detracted from accessibility [38, 39]. According to patients with pluripathologies, specialist appointments required a referral from primary care and were therefore difficult to obtain at short notice, hence showed lower accessibility [43].

## Personal self-responsibility and patient involvement

Patient involvement or participation emerged to be critical aspects of continuity of care in general [39, 45] or specifically part of RC [38]. Continuity of care could be improved when patients not only were able to advocate for themselves, but also took over responsibility in managing their disease [39]. Participation in decision-making and coordination of their care seemed to be important factors for the majority of patients receiving home care, also in the context of linking services across levels of care. Some patient-involvement activities were 'keeping track of their improvements (monitor)' or 'seeking information about what to expect before moving to another setting (prepare)' [45].

## Patients experiencing interdependency of continuity of care

While analysing patients' perspectives, interrelation and dependency of all types of continuity became evident (Fig. 2), particularly regarding combinations with RC.

RC was related to IC in the following aspects: a personal GP acquired 'non-biomedical' knowledge [35, 47] and familiarity with the patient's medical history over the years [36, 44]; consequently, patients were spared from repeating their medical history [34, 38], resulting in higher efficiency of care [34]. Consistency of personnel was seen by some home care patients to be the only solution, how professionals could gain detailed contextual knowledge [28]. An ongoing relationship formed the prerequisite for patients at the end of their life for receiving adequate information at the right time in a sensitive manner [35]. In return, the provision of clear and relevant information fostered RC [39].

Regarding interconnections between RC and MC, patients perceived that in an ongoing relationship with their GPs

Table 4 Key lessons

Accessibility to different levels of care, a smooth discharge process and individualized care are important features of MC 'Personal self-responsibility' and 'patient involvement' are critical factors that enhance continuity of care Interdependency of all types of continuity of care became evident, particularly linking RC with IC and MC continuity

treatment was more tailored (flexible) to their individual circumstances [34]. Patients with diabetes recognized that they more likely adapted to poor accessibility, e.g. long waiting times and delays in getting appointments, when there was a good patient-physician relationship [38]. Moreover, patients considered that the availability of their named GP or practice nurse, even if only by telephone, was crucial for maintaining RC. Consulting more than one physician (inconsistency of personnel) could disorganize treatment plans, as patients got confused about whose advice to follow [27].

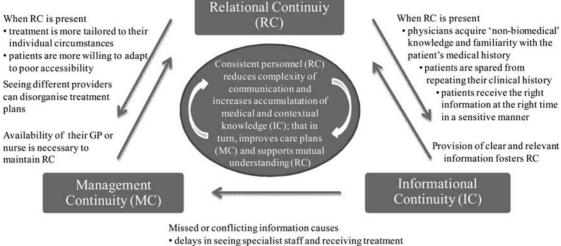
Finally, interrelation between MC and IC was manifested within the analysis. Patients with diabetes reported delays in seeing specialist staff and receiving treatment because of missed information [38]. When appropriate and timely information was absent, mentally ill patients identified transition between services as a source of stress and vulnerability [37]. Table 4 highlights the study's main key lessons learned.

### Discussion

This article targeted to synthesize patient's views on RC, IC and MC across care levels, their attributed relevance, as well as perceived causes and consequences of discontinuity, based on a review of qualitative articles. We have further identified elements that enhance continuity of care (Table 3). Variations in perceived importance seem to depend on both individual and contextual factors. The selected articles most frequently investigated RC, thus most information was available about that type of continuity.

Regarding RC, it became apparent that patients refer to consistency of personnel when they are seen over time on a regularly basis by one physician or a team of professionals in primary and secondary care. Consistency of personnel is considered to positively influence or to be a prerequisite for establishing an ongoing relationship with a sense of affiliation. The development of that kind of relationship is further facilitated by delivering high-quality consultations, referring to, e.g. the physician's attentiveness or medical knowledge. Whereas authors of some studies [26, 27, 48] postulate that in order to sustain a long-term connected care, regular contact is required, elsewhere it is suggested that patients view RC in terms of being comfortable with a physician, rather than the number of visits [49].

Although an ongoing relationship was highly valued, patients also highlighted disadvantages, e.g. the risk of symptoms being taken for granted (overfamiliarity). However,



stress and vulnerability during the transition process

Figure 2 Cycle of interrelation between types of continuity of care. Source: Author's own elaboration.

literature suggests that perceived benefits outweigh negative consequences [11, 34], e.g. the risk of overfamiliarity compared with the advantages of being attended by a physician on a regular basis. Therefore, disadvantages associated with RC should be understood and mitigated, and an ongoing, therapeutic relationship encouraged, as long as individuals' preferences are respected [11].

Concerning IC, patients perceive that communication and interaction between providers, as well as transference of medical data across care levels foster IC; however, perceived scarce cross-boundary communication in some settings negatively influenced IC. Conversely, it was discussed elsewhere that some aspects of IC are less salient to patients [50], e.g. low awareness of information transfer [38]. Regarding patients' understanding of accumulated knowledge, little information was provided in selected articles, being solely linked with the gathering of holistic information by their GPs.

Regarding MC, patients mention a smooth discharge management, individualized or tailored care, easy access to services in different care levels as well as immediate response to be influencing factors of MC. Literature on MC mainly focuses on accessibility and patients' preferences where rapid access or an immediate intervention is balanced with seeing a preferred provider [10, 27, 31, 36, 38], particularly in primary care, where patients have significant control over appointment making [50]. Similarly, it became apparent in the metasynthesis that a specific cluster of patients trades quick access against RC. Freeman et al. [50] propose that access should be studied together with continuity of care to highlight patients' trade-off preferences, but concepts should be distinguished and not complemented. They consider access to be a key facilitator, necessary to enable continuity [50]. However, access may be a prerequisite for continuity of care in spontaneous visits by not showing a longitudinal nature-one core element of continuity of care, but not regarding access to the other care levels due to a referral. We suggest that the inclusion of accessibility as a proper dimension should be further discussed.

Interdependency of different types of continuity of care, particularly linking RC with IC and MC, became apparent during the analysis and is presented in a cycle of interrelations (Fig. 2). In concordance with results, some authors suggest that consistent personnel promotes all attributes of continuity of care [1, 28], amongst others it reduces the complexity of communication required [28] and supports the accumulation of medical and contextual knowledge about the patient [28, 48]. In turn, patients prefer to see their GP since they dislike having to repeat their story to different clinicians [11]. Those aspects improve care plans [48], support the mutual understanding and encourage a sense of responsibility towards the patient [1, 48]. Wierdsma *et al.* suggest that better understanding of the complex interrelationship is needed in order to improve continuity of care [48].

## **Considerations and limitations**

When targeting transferability of our findings, we should consider peculiarities of the included articles: first, more than half of the studies were conducted in the UK; therefore features of country-specific healthcare systems should be taken into account since patients' experiences are influenced by how healthcare services are structured and administrated [10]. However, including studies conducted in different contexts lead to a breadth of information that supports better understanding of the phenomenon. Secondly, samples of those studies that analysed chronic conditions (e.g. type two diabetes) were often skewed to elderly people; hence, perceptions of younger patients were underrepresented in the synthesis. Thirdly, the most analysed setting was primary care that could partially explain the high value set on the relationship with the GP compared with the hospital staff.

## Implications for clinical practice and further investigation

Patients did not only attach importance to some continuity dimensions, e.g. an ongoing relationship or information transfer, but have also identified and attributed value to less analysed aspects that were regarded to be critical features for achieving a smooth progress of the patient through the system, e.g. regularity of visits, the discharge process, individualized care or self-responsibility. The importance of continuity attributes seems to vary according to personal factors, health condition and care setting. Therefore, it is recommended to take into account and further examine the influence of contextual elements of healthcare provision (setting, practice size) and individual factors (socio-demographic characteristics and different pathologies) on continuity across boundaries. A particular focus should be set on the analysis of young patients' perceptions as being one relevant age group that has been less studied. Finally, when targeting to improve one type of continuity, attention should be paid to interdependency within continuity of care.

## Funding

The study was partly funded by Funds for Healthcare Investigation (Fondo de Investigaciones Sanitarias: PI08/ 90154). Moreover, a grant was provided to S.W. by the Consortium for Healthcare and Social Services of Catalonia.

## References

- 1. Reid R, Haggerty J, McKendry R. *Defusing the Confusion: Concepts and Measures of Continuity of Healthcare*. Ottawa: Canadian Health Services Research Foundation, 2002.
- 2. Boerma W. Coordination and integration in European primary care. In: Saltman R, Rico A, Boerma W (eds). *Primary Care in the Driver's Seat? Organizational Reform in European Primary Care.* Berkshire: Open University Press, 2006.
- Mollica RL, Gillespie J. Care Coordination for People with Chronic Conditions. Baltimore: National Academy for State Health Policy, 2003.
- Van Servellen G, Fongwa M, Mockus D'Errico E. Continuity of care and quality care outcomes for people experiencing chronic conditions: a literature review. *Nurs Health Sci* 2006;8:185–95.
- Guthrie B, Saultz JW, Freeman GK et al. Continuity of care matters. BMJ 2008;337:a867.
- 6. Saultz JW, Albedaiwi W. Interpersonal continuity of care and patient satisfaction: a critical review. *Ann Fam Med* 2004;**2**:445–51.
- Van Walraven C, Oake N, Jennings A *et al.* The association between continuity of care and outcomes: a systematic and critical review. J Eval Clin Pract 2010;16:947–56.

- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;83:457–502.
- 9. Cabana MD, Jee SH. Does continuity of care improve patient outcomes? *J Fam Pract* 2004;**53**:974–80.
- Parker G, Corden A, Heaton J. Synthesis and Conceptual Analysis of the Sdo Programme's Research on Continuity of Care. Southampton: National Institute for Health Research Service Delivery Organisation Programme, 2010.
- Freeman GK, Hughes J. Continuity of Care and the Patient Experience: An Inquiry into the Quality of General Practice in England. London: The King's Fund, 2010.
- Freeman GK, Shepperd S, Robinson I *et al.* Continuity of care: report of a scoping exercise for the NCCSDO. London: NCCSDO, 2001.
- Haggerty JL, Reid RJ, Freeman GK et al. Continuity of care: a multidisciplinary review. BMJ 2003;327:1219–21.
- 14. Starfield B. Coordinación de la atención en salud. In: Starfiel B (ed). *Atención primaria*. Barcelona: Masson, 2002, 233–65.
- Shortell SM, Gillies RR, Anderson DA *et al.* Remaking health care in America. San Francisco: The Jossey-Bass health care series, 1996.
- Preston C, Cheater F, Baker R *et al.* Left in limbo: patients' views on care across the primary/secondary interface. *Qual Health Care* 1999;8:16–21.
- 17. Saultz JW, Lochner J. Interpersonal continuity of care and care outcomes: a critical review. *Ann Fam Med* 2005;**3**:159–66.
- Pandhi N, Saultz JW. Patients' perceptions of interpersonal continuity of care. J Am Board Fam Med 2006;19:390–7.
- Evans D. Database searches for qualitative research. J Med Libr Assoc 2002;90:290-3.
- Sandelowski M, Barroso J. Handbook for Synthesizing Qualitative Research. New York: Springer Publishing Company, 2006.
- 21. Sherwood G. Meta-synthesis: merging qualitative studies to develop nursing knowledge. Int J Human Caring 1999;3:37–42.
- Mays N, Pope C. Qualitative research in health care. Assessing quality in qualitative research. BMJ 2000;320:50–2.
- Mays N, Pope C, Popay J. Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. J Health Serv Res Policy 2005;10(Suppl. 1):6–20.
- 24. Noblit G, Hare R. Meta-Ethnography: Synthesising Qualitative Studies. Sage Publications: Newbury Park, 1988.
- 25. Walsh D, Downe S. Meta-synthesis method for qualitative research: a literature review. J Adv Nurs 2005;50:204–11.
- Infante FA, Proudfoot JG, Powell DG *et al.* How people with chronic illnesses view their care in general practice: a qualitative study. *Med J Aust* 2004;181:70–3.
- Alazri MH, Neal RD, Heywood P *et al.* Patients' experiences of continuity in the care of type 2 diabetes: a focus group study in primary care. *Br J Gen Pract* 2006;**56**:488–95.
- Woodward CA, Abelson J, Tedford S *et al.* What is important to continuity in home care? Perspectives of key stakeholders. *Soc Sci Med* 2004;58:177–92.

- Lester H, Tritter JQ, Sorohan H. Patients' and health professionals' views on primary care for people with serious mental illness: focus group study. *BMJ* 2005;330:1122.
- Wong ST, Watson DE, Young E *et al.* What do people think is important about primary healthcare? *Healthc Policy* 2008;**3**:89–104.
- Boulton M, Tarrant C, Windridge K et al. How are different types of continuity achieved? A mixed methods longitudinal study. Br J Gen Pract 2006;56:749–55.
- 32. Mercer SW, Cawston PG, Bikker AP. Quality in general practice consultations; a qualitative study of the views of patients living in an area of high socio-economic deprivation in Scotland. BMC Fam Pract 2007;8:22.
- Wong ST, Regan S. Patient perspectives on primary health care in rural communities: effects of geography on access, continuity and efficiency. *Rural Remote Health* 2009;9:1142.
- 34. Guthrie B, Wyke S. Personal continuity and access in UK general practice: a qualitative study of general practitioners' and patients' perceptions of when and how they matter. BMC Fam Pract 2006;7:11.
- 35. Michiels E, Deschepper R, Van Der KG *et al.* The role of general practitioners in continuity of care at the end of life: a qualitative study of terminally ill patients and their next of kin. *Palliat Med* 2007;**21**:409–15.
- Cowie L, Morgan M, White P *et al.* Experience of continuity of care of patients with multiple long-term conditions in England. *J Health Serv Res Policy* 2009;14:82–7.
- Jones IR, Ahmed N, Catty J *et al.* Illness careers and continuity of care in mental health services: a qualitative study of service users and carers. *Soc Sci Med* 2009;69:632–9.
- Naithani S, Gulliford M, Morgan M. Patients' perceptions and experiences of 'continuity of care' in diabetes. *Health Expect* 2006;9:118–29.
- 39. Nair KM, Dolovich LR, Ciliska DK *et al.* The perception of continuity of care from the perspective of patients with diabetes. *Fam Med* 2005;**37**:118–24.
- O'Cathain A, Coleman P, Nicholl J. Characteristics of the emergency and urgent care system important to patients: a qualitative study. J Health Serv Res Policy 2008;13(Suppl. 2): 19–25.

- 41. Pooley CG, Gerrard C, Hollis S et al. 'Oh it's a wonderful practice... you can talk to them': a qualitative study of patients' and health professionals' views on the management of type 2 diabetes. *Health Soc Care Community* 2001;9:318–26.
- McCormack B, Mitchell EA, Cook G *et al.* Older persons' experiences of whole systems: the impact of health and social care organizational structures. *J Nurs Manag* 2008;16:105–14.
- Williams A. Patients with comorbidities: perceptions of acute care services. J Adv Nursing 2004;46:13–22.
- 44. Von Bültzingslöwen I, Eliasson G, Sarvimaki A et al. Patients' views on interpersonal continuity in primary care: a sense of security based on four core foundations. Fam Pract 2006;23:210–9.
- Harrison A, Verhoef M. Understanding coordination of care from the consumer's perspective in a regional health system. *Health Serv Res* 2002;37:1031–54.
- Campbell SM, Gately C, Gask L. Identifying the patient perspective of the quality of mental healthcare for common chronic problems: a qualitative study. *Chronic Illn* 2007;**3**:46–65.
- Green CA, Polen MR, Janoff SL *et al.* Understanding how clinician-patient relationships and relational continuity of care affect recovery from serious mental illness: STARS study results. *Psychiatr Rehabil J* 2008;**32**:9–22.
- 48. Wierdsma A, Mulder C, de Vries S *et al.* Reconstructing continuity of care in mental health services: a multilevel conceptual framework. *J Health Serv Res Policy* 2009;**14**:52–7.
- Pandhi N, Bowers B, Chen FP. A comfortable relationship: a patient-derived dimension of ongoing care. *Fam Med* 2007;**39**:266-73.
- 50. Freeman G, Woloshynowych M, Baker R et al. Continuity of Care 2006: What Have We Learned Since 2000 and What Are Policy Imperatives Now? London: National Coordinating Centre for Service Delivery and Organisation, 2007.
- Nazareth I, Jones L, Irving A *et al.* Perceived concepts of continuity of care in people with colorectal and breast cancer—a qualitative case study analysis. *Eur J Cancer Care (Engl)* 2008;17:569–77.