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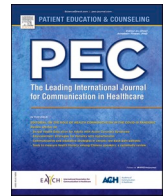
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Patient-clinician collaboration in making care fit: A qualitative analysis of clinical consultations in diabetes care

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ABSTRACT

Objective: To confirm described dimensions of making care fit and explore how patients and clinicians collaborate to make care fit in clinical practice.

Methods: As part of an ongoing study, we audiotaped and transcribed patient-clinician consultations in diabetes care. We purposively selected consultations based on participants' demographical, biomedical and biographical characteristics. We analysed transcripts using reflexive thematic analysis. We combined a deductive and inductive approach, using the pre-described dimensions of making care fit and adding new (sub-)dimensions when pertinent.

Results: We analysed 24 clinical consultations. Our data confirmed eight previously described dimensions and provided new sub-dimensions of making care fit with examples from clinical practice (problematic situation, influence of devices, sense of options, shared agenda setting, clinician context, adapting to changing organization of care, and possibility to reconsider).

Conclusion: Our study confirmed, specified and enriched the conceptualization of making care fit through practice examples. We observed patient-clinician collaboration in exploration of patients' context, and by responsively changing, adapting or maintaining care plans.

Practice implications: Our findings support clinicians and researchers with insights in important aspects of patient-clinician collaboration. Ultimately, this would lead to optimal design of care plans that fit well in each patient life.

1. Introduction

While the number of people living with chronic conditions is increasing, care for chronic illnesses has shifted from the professional to the patient, and from hospital to outpatient offices and homes [1]. Diabetes Mellitus (DM) is one of the most common chronic conditions, in which people, especially when insulin dependent, need to self-manage their disease. This requires not only adequate knowledge and coping skills, but also skills to adjust self-management in the context of daily life activities [2,3]. Novel glucose monitoring techniques, such as insulin pumps and continuous glucose monitoring devices, can help improve

glucose control, but people still require (other) self-management skills, which affect daily life [4]. Importantly, people with DM often live with other chronic conditions as well, complicating peoples' efforts to weave care into their lives [3].

Care has also shifted from being mostly illness-oriented to being more patient- or person-oriented. This is essential for high-quality care, and for person-centred care, in which patients not only achieve a functional, but also a meaningful life [5,6], in which their perspectives and expertise is acknowledged as they design and enact sensible plans of care that support them to adapt, cope, and thrive while living with chronic conditions and their treatment [7]. Despite all efforts, however,

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evidence suggests that care plans do not always fit well in the lives of people [8,9].

Since 2021, an international and interdisciplinary group of patients, informal caregivers, clinicians, researchers, policy makers, and health-care designers has conducted work to identify dimensions for making care fit. Their expert views, first published in the ‘Making care fit Manifesto’ [10], were later expanded through a systematic literature review [11]. To date, their work has identified nine dimensions for making care fit [11]. Briefly, in making care fit, patients and clinicians engage in an ongoing, iterative and unhurried collaboration, to ensure that care maximally responds to the patient’s unique situation and priorities, while minimally disrupting their lives and social networks [11].

The aim of this study was to confirm the described dimensions of making care fit, and to explore how patients and clinicians discuss these dimensions in diabetes care.

2. Methods

2.1. Design

This study is part of an ongoing single-centre study investigating the implementation of a data dashboard on person-centredness, using a pre-test/post-test design, and conducted at the Leiden University Medical Center (LUMC, The Netherlands). The LUMC is a tertiary academic medical centre and caring for people with DM. It is a referral centre for islet and pancreas transplantation, and treatment of rare types of DM. The present study is a qualitative analysis of a sub-set of transcribed audio-recordings of clinical consultations, collected during the *pre-test* (care-as-usual) phase of the larger study. In that study, sixty patients were invited to participate in the pre-test phase, of which 10 declined. We analysed data collected between October 2021 and November 2022.

2.2. Participants and sampling

Adults (≥ 18 years of age) with DM were eligible if they visited the out-patient clinic for their yearly check-up and were able to read and understand the informed consent document. Endocrinologists and diabetes specialist nurses who participate in the care of people with DM at the participating diabetes clinic were eligible.

From our study database, we purposefully selected a heterogeneous sample of patient-clinician consultations, aimed to increase the diversity of observable patient and clinician behaviours relevant to the dimensions of making care fit. We selected consultations based on the following 12 demographical and biomedical characteristics: a) Patient characteristics: sex, age, educational level, type of diabetes, current type of diabetes treatment, monitoring technique, and Charlson comorbidity index [12,13]; b) Clinician characteristics: sex and occupation; c) Consultation characteristic: face-to-face or mediated, i.e. audio(visual) call; and d) Patient-clinician relationship: duration between first and current encounter and number of total encounters between patient and their continual clinician. We ensured that all levels (see Table 1) of each of these 12 characteristics were at least applicable to two encounters.

After selecting encounters based on demographical and biomedical characteristics, we selected additional consultations based on a novel approach: patients’ biographical characteristics. Again, using this approach we aimed to increase the diversity of observable patient and clinician behaviours. From all remaining transcripts, two reviewers (MKi and MKu) created brief biographies of the patients, based on what had been said about life events, lifestyle, social functioning, and self-descriptions of identity (see Supplementary Table 1). In consensus, we selected all additional consultations that included unique aspects of a patient’s biography.

We aimed to include a heterogeneous sample to generate meaning from our data, consistent with the reflexive thematic analysis approach [14]. We selected a sample of 15 consultations that varied based on demographical and biomedical characteristics of the patients, and an

Table 1
Sample characteristics.

Characteristic	N (%)
Patient Characteristics (N = 24)	
Sex	
Female	15 (62)
Male	9 (38)
Age	
18-35 years	4 (17)
35 – 65 years	15 (62)
Older than 65	5 (21)
Type of diabetes	
Type 1	18 (75)
Type 2	3 (12)
Other	3 (12)
Treatment	
Oral glucose lowering medication only	2 (8)
Insulin injection therapy,	9 (38)
Insulin pump	13 (54)
Glucose monitoring	
Finger prick testing	2 (8)
Intermittently scanned continuous glucose monitoring	18 (75)
Real time continuous glucose monitoring	4 (17)
Patient characteristic: Charlson comorbidity index [15,16]	
Mild (1-2)	8 (33)
Moderate (3-4)	9 (38)
Severe (≥ 5)	7 (29)
Patient characteristic: educational level ¹	
Low	3 (12)
Middle	4 (17)
High	8 (33)
Unknown	9 (38)
Clinician Characteristics (N = 9)	
Occupation	
Endocrinologist (n = 3)	11 (46)
Diabetes specialist nurse (n = 5)	11 (46)
Internal medicine resident (n = 1)	2 (8)
Sex	
Male	2 (8)
Female	22 (92)
Consultation Characteristics (N = 24)	
Type	
Face-to-face	21 (88)
(Video)phone	3 (12)
Patient companion present during consultation*	
Yes	2 (8)
No	22 (92)
Relational Characteristics (N = 24)	
Length and intensity	
<1 year	
<5 times	2 (8)
6-20 times	1 (4)
21 > times	0 (0.0)
1-5 years	
<5 times	1 (4)
6-20 times	6 (25)
21 > times	3 (12)
> 5 years	
<5 times	0 (0)
6-20 times	3 (12)
21 > times	8 (33)

¹ We followed the categorisation of the Dutch Central Bureau of Statistics [25]

* Additional information not used for sampling

additional nine consultations that varied based on biographical patient characteristics.

For our deductive analysis, we could observe every theme (that we consider suited for observation) in our sample of 24, suggesting a large enough sample. With regard to our inductive analysis, we took into consideration the guidance Braun and Clarke offer on reflexive thematic analysis [14]: “Coding and deeper analysis do not inevitably reach a fixed end point – instead, the researchers make a situated, interpretative judgement about when to stop coding [...]”. Our interpretive judgement

was that our sample provided us with richness of data fitting our aim of exploring making care fit in clinical practice, realizing that other interpretations may be possible and further research is necessary to validate our findings in other settings.

2.3. Study procedures

Participating patients provided informed consent, after which the clinician audio-recorded the consultation. Audio-recordings were transcribed verbatim.

2.4. Study measures

We reviewed electronic medical records to obtain information on sex, age, type of diabetes, diabetes treatment, frequencies of consultations with a specific clinician, and length of the relationship (time from first contact at LUMC until this consultation) (see Table 1).

2.5. Data analysis

We used descriptive analyses to describe our sample. Two researchers coded all transcripts. They had different backgrounds (MKi as a medical doctor, MKu as a clinical linguist and communication

researcher), and reflected on their complementing perspectives when interpreting their codes.

We used reflexive thematic analysis [15] to identify behaviours relevant to the dimensions of making care fit. That is, we searched for how these dimensions are touched upon in clinical practice (e.g. discussing patients' priorities), without considering the actual contribution of the dimension to the designed care plans (e.g. explicitly considering priorities in designing care plans). We used a combined deductive and inductive approach, with the pre-described dimensions and sub-dimensions from the Making care fit Manifesto [10] and the previous literature review [11] as deductive themes and sub-themes (see Box 1), and adding new subthemes inductively when observed collaborative behaviours did not fit well in the existing (sub)themes. The reviewers first familiarised themselves with the data by reading two transcripts. They discussed these transcripts to stimulate reflection. They then individually generated initial codes based on a pilot round using five purposefully selected consultations, and subsequently discussed their codes. They sought to identify sub-themes and assessed whether these sub-themes would fall in the nine deductively identified themes of making care fit. The reviewers used this pilot round to develop an initial code tree, which was discussed amongst the research team. The reviewers then independently coded sub-sets of consultations, in batches of 2–4 consultations, and after each batch discussed their codes. When

Box 1

Deductively described themes and sub-themes of Making Care Fit [10,11].

For care to fit, care should be maximally responsive to

1. Patients' unique situation

a) Medical situation, b) Personal situation

2. and Patients' priorities

a) Priorities, b) Wishes, c) Needs, d) Goals, e) Worries
At the same time, care should minimally disrupt

3. Patients' lives

a) The work of being a patient, b) Impact of condition on life, c) Patient capacity

4. and Patients' social networks

a) Experiences of social networks, b) Support for social networks, c) Work of social networks
Making care fit requires collaboration in terms of

5. Content

a) Awareness of options, b) Pros and cons, c) Patients' values and preferences

6. and Manner

a) Building and maintaining relationship, b) Emotional behaviours, c) Using support for collaboration
This is

7. an Ongoing and iterative process

a) Iterative future care planning, b) Continuity of care, c) Adapting to medical situation, d) Adapting to personal situation

8. of unhurried collaboration (right time and pace)

9. that may positively impact those involved

a) Consequences for patients, b) Consequences for social networks, c) Consequences for clinicians, d) Consequences for healthcare systems.

new sub-themes were identified or the description of a subtheme changed significantly, they recoded all previously coded consultations to ensure all possible examples were collected to enrich the concept of making care fit. During this process, they built a thematic map of the analysis. Consultations were coded supported by Atlas t.i. 9 software.

2.6. Ethical approval

The Institutional Review Board exempted our study from a full ethics review, according to the Medical Research Involving Human Subjects Act (Wet Medisch-Wetenschappelijk Onderzoek met Mensen; W2021.015).

3. Results

3.1. Sample characteristics

We included a total of 24 consultations in our sample and present their characteristics in Table 1 and Supplementary Table 1.

3.2. Themes, sub-themes and structure

We observed behaviours relevant for and were thus able to confirm eight of the nine deductively defined themes. The theme ‘unhurried collaboration’ (Theme 8) was not observed. Inductively, we generated seven new sub-themes related to the unique situation, lives, patient-clinician collaboration and ongoing and iterative process: i) Problematic situation (Patients’ unique situation), ii) Influence of devices (Patients’ lives), iii) Sense of options (Patient-clinician collaboration, content), iv) Shared agenda setting (Patient-clinician collaboration, manner), v) Clinician context (Patient-clinician collaboration, manner), vi) Adapting to changing organisation of care (Ongoing and iterative process), and vii) Possibility to reconsider (Ongoing and iterative process) (see Fig. 1).

Exploring how patients and clinicians discuss the (sub)dimensions in clinical care, we observed in most consultations that they first addressed the patients’ context by discussing the patients’ unique situation and occasionally also their priorities, lives and social networks (Themes 1–4). After or alternating with exploring the situation, patients and clinicians designed care plans by either changing care (e.g., option A vs option B), adapting care (e.g., (slightly) adapting how current option is implemented) or maintaining care after evaluation (Themes 5 and 7) (Fig. 1). Patients and clinicians made efforts to build or maintain the relationship (Theme 6). Lastly, in some instances the consequences of efforts to make care fit were discussed (Theme 9).

3.3. Exploring patients’ context

3.3.1. Theme 1: patients’ unique situation

The situation discussed could be the current or the anticipated future situation. The medical situation was discussed in all consultations and the personal situation in most consultations. Occasionally, the situation was phrased as being ‘problematic’. This included patients’ reflections on how they considered their situation to be complex and undesired; intertwining multiple aspects of their personal and medical situation.

Patient: “But it remains that work is actually the biggest negative factor. It makes me do all the other negative things too. If that [work] becomes too much, I will sleep less, less sleep will make me hungry, hunger will make me eat wrong, wrong food will make me fatter. Then I become lethargic again, I feel less like moving. And then, it goes [spirals] down and the sugar goes up.” (Consultation 20)

Such verbalised problematic situation, referring to a complex and undesired situation rather than a singular worry or concern, either justified the need to adjust care plans or to not make any changes for the time being, until other aspects of life – with higher priority – were improved.

Sub-theme	Patient																								Description and exemplary quotes	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Theme 1: Patient's unique situation																										
-Medical situation																										The biomedical aspects of a patient's situation "You are now in time of target range at 43% . Relatively few hypos."
-Personal situation																										The personal aspects of a patient's situation "As Chief Director of Finance. So I managed financial administration."
-Mix Medical and Personal																										Intertwined biomedical and personal aspects of a patient's situation "I am very tired [...] Whether that's the diabetes, I don't know."
-Problematic situation*																										A situation defined by the patient as problematic and undesired "Big toe, left foot. [amputated] It's painful and I'm heavily on painkillers."
Theme 2: Patient's priorities																										
-Patient's priorities																										Patient's priorities in trade-offs "That is a precursor of macular oedema, I really don't want to get that."
-Patient's wishes																										Patient's wishes without the formulation of a goal "HbA1c is 58. I would like something lower."
-Patient's goals																										The patient formulate concrete goals to reach desired situation ">13.9 is now 4%. I would actually, if you ask me, like to have 1%"
-Patient's worries																										The patient's worries about past, current or anticipated situation "It still bugs me a bit. [...] what could I have prevented?"
Theme 3: Patient's lives																										
-Patient's work																										Activities relating to care perceived as work or as burden "I think my values are good [...] but it takes a lot of effort. A lot of effort."
-Patient's lives (impact)																										Impact of condition or care on a patient's wellbeing "I still think diabetes is a very nasty disease. You are never free from it."
-Patient's capacity																										Acknowledgement, acceptance or efforts to build capacity or resilience "I should also exercise more. [...] but I can't leave my husband alone [...]"
-Patient's devices*																										Technology impacting care activities and a patient's life "Ideal in terms of pump, if I have to change at work, it is very quickly."
Theme 4: Patient's social networks																										
-Experiences of social network																										Impact of patient's condition or care on social networks Partner: " It is overwhelming", Patient: "For me, this is not a surprise"
-Supporting social network																										Efforts to support the social network of patients "[...] your daughter [...]. If she wants to, we can prescribe something."
-Work of social network																										Activities relating to care for a friend or loved one " [...] I depend on her. Not only do I have diabetes, she actually does too."

Fig. 1. Thematic map with exemplary quotes * Sub-themes have been retrieved inductively from transcripts of clinical consultations.

Theme 5: Collaboration, content																									
-Awareness of options																									Fostering choice awareness "In your case, it's just a little bit elevated, so then it's what you prefer."
-Pros and cons of options																									Discussion of pros and cons of options "You can try another insulin [...] it has a somewhat more stable profile."
-Values and preferences																									Discussion of values and preferences concerning care options "What bothers me, is that I had side-effects from that medication."
-Sense of options*																									Discussion of rational, emotional or practical impact of care options "[...] what if such a moment comes, what can I do best? That choice."
Theme 6: Collaboration, manner																									
-Shared agenda setting*																									Agenda for consultation set together with patient "Were there things you wanted to discuss?"
-Building and maintaining relationship																									Efforts to build or maintain relationship e.g. team talk "That's how you should see it, us as a team, we want the best for you."
-Emotional behaviour																									Emotional behaviours enabling collaboration e.g. showing respect "Are you hanging in there? Because it's also quite intensive, isn't it?"
-Clinician personal context*																									Clinician sharing personal details, demonstrating two-sided openness "I will be on vacation" "Far away?" " Yes, Italy" [...] "It's beautiful there".
-Using support																									N.A.
Theme 7: Ongoing and iterative process																									
-Possibility to reconsider*																									Allowing flexibility to reconsider decisions made in care planning "We have applied for 3 months and if you don't like it [...] we can stop."
-Future care planning																									Planning future care appointments and activities in care plans "Well, what we're going to arrange: an appointment with [name]."
-Continuity of care																									Efforts to coordinate care "We have to coordinate the care with the ophthalmologist."
-Adapting (medical)																									Efforts or experiences with adapting care to the biomedical situation "lowered to 11 [insulin, because of weight loss]" "You did the right thing"
-Adapting (personal)																									Efforts or experiences with adapting care to the personal situation " You can try, not to inject short-acting insulin at all before cycling."
-Adapting (organisational)*																									Efforts or experiences with adapting care to the organisation of care " We have chosen that we will pay extra for this specific insulin."
Theme 8: Time and pace																									
N.A.																									N.A.
Theme 9: Consequences																									
-For patients																									Consequences of making care fit for a patient's wellbeing "I feel good about myself [...]. And I can function well."
-For clinicians																									N.A.
-For social networks																									N.A.
-For health care systems																									N.A.

Fig. 1. (continued).

3.3.2. Theme 2: patients' priorities

Patients' priorities were discussed in several consultations and most often involved patients expressing a wish or explicitly setting priorities. Most wishes and priorities were medical and concerned glucose regulation. Patients sometimes tried to balance being ambitious in terms of medical goals and being realistic in terms of what it takes to achieve these goals.

Clinician: "No one gets it perfect, but what matters is whether you are satisfied with it yourself. [...] So are there things you would like to improve? As far as I'm concerned, that's not necessary, it's very neat."

Patient: "Well, I would like it to be flatter [glucose curve]. But that's a utopia." (Consultation 13)

3.3.3. Theme 3: patients' lives

Current or anticipated aspects of the patients' lives, and the influence of diabetes and diabetes treatment on their lives, were discussed in almost all consultations. This mostly concerned the influence of devices, the work of being a patient (e.g. constantly being alert and aware of how their actions influence glucose regulation) or the impact of having diabetes on their (daily) lives. Less frequently, the patients' capacity was discussed, including lack of capacity or ways to (re)build capacity.

Devices were sometimes perceived as helpful and eased the burden of diabetes care, e.g.:

Clinician: "I had also already included the data of your flash glucose monitor. Are you satisfied with how that is going?"

Patient: "It's a really good invention. I am so happy with it. You can actually measure every moment without [finger pricking]. Because my fingers were already bothering me, and now it's fine. It's a great solution." (Consultation 13)

In some cases, devices did not seem to fit well in a patient's life at that particular moment:

Patient: "By the way, I stopped using the [insulin] pump. [...] Because it drove me crazy. It leaked so often. So, I stopped in my pregnancy. Then I talked to [specialised diabetes nurse]: I'm going back to the [insulin] pen, because I just need to know what goes in. (Consultation 19)

3.3.4. Theme 4: patients' social networks

Patients' social networks were discussed in seven consultations, in one of which a patient companion was actually present. Most often the conversations concerned the social networks' work of caring for the patient and their experiences with caring. Less often these conversations were about the support the network needed or received. Only in one consultation, all three aspects were discussed:

Clinician: "Because you're not alone, are you?"

Patient: "[I am] With my daughter and I always have her around."

Clinician: "That would mean your daughter has to [administer glucagon in case of hypoglycaemia]. If she wants to, we can prescribe something again. She also needs to know how to administer it and when."

Patient: "Well, I recently went through how she should inject and which one for the day and which one for the night."

Clinician: "Okay. How old is she again?"

Patient: "She's 14. [...] She doesn't like it. But, if she has to, I think she will [do it]."

Clinician: "[...] Or she could be the one who gets help." (Consultation 12)

3.4. Patient-clinician collaboration

3.4.1. Theme 5: patient-clinician collaboration, content

In some consultations, patients and clinicians explicitly collaborated to change the plans of care, i.e., they applied shared decision making by fostering choice awareness, discussing the options and patient preferences [16]. In some cases, they also discussed the practical, emotional or rational sense of treatment options, for example:

Clinician: "What we can do is add even more insulin [...] On the other hand, we can do [...] in terms of lifestyle, what is achievable. Ultimately, when the weight goes down, you become more sensitive to insulin. [...] It is a bit tricky, so we can certainly do something with the insulin, but that makes the weight loss more difficult [...]. So that's kind of where we must compromise. You can indicate what you would like in this area." (Consultation 7)

3.4.2. Theme 6: patient-clinician collaboration, manner

We observed patient-clinician efforts to build or maintain a patient-clinician relationship and shared agenda setting, for example:

Clinician: "Are there specific questions or things that you would like to discuss?" (Consultation 2).

We also observed emotional behaviours where clinicians showed attention for patients' experience and acknowledged patients' difficulties. Some clinicians were open and shared personal details with their patients, to seemingly comfort patients or provide suggestions.

Patient: "It's the summer. I always need fruit. I don't know if it's bad for the diabetes, but I enjoy it so much."

Clinician: "For the blood sugars it is. [...] I always lose weight on holidays for some reason and I think it's because you snack less. I still think it's healthier [...]." (Consultation 24)

Clinicians also expressed compassion and support in discussions about 'do-it-yourself looping'.

Patient: "Well, I don't know for sure. I think if it [closed loop system] exists, it may be the future. The father of a friend of my eldest [child] looped. I thought I could learn from him. [...] But do you ever talk about, when it goes wrong?"

Clinician: "Well, not that, but you know what it is [...] it falls outside the pump guarantee. [...] If you do it, make sure you delve into it. Realise you crack the system and it could lead to problems with your pump warranty. [...] But of course, we will think along with you." (Consultation 8)

Similarly, we observed patients showing openness and kindness towards their clinician. For example, patients were open about finding it difficult to discuss certain topics.

Patient: "I don't sleep well. I'm just very tired, lethargic, problems with urination, erectile dysfunction. Well, all of that together makes that I don't feel very comfortable in my skin."

[...]

Clinician: "It's good that you discuss this."

Patient: "Yes, it is not the easiest subject to bring up." (Consultation 17)

3.5. Designing care plans

3.5.1. Theme 7: ongoing and iterative process (adapting or maintaining care)

Even when there appeared no desire to change the course of care, care sometimes still needed to be adapted to a specific change in the medical or personal situation or to policies concerning the organisation of care. For example, in case of pregnancy, weight loss, coping with another co-existing illness, but also exercising or having social activities including drinking alcohol.

Patient: "Yes, recently I have also been puzzling with the number of units that I inject before a meal. I talked about this in the conversation with the dietician of [name of institution]. He said: "but if you have lost so much weight, then you also have to use less insulin for every meal." [...] I started doing that and then I found out that for the morning meal where I eat something like 20 carbs, I normally shot something like 24 and that has now been reduced to 8." (Consultation 11)

Sometimes care plans, even those that seemed to fit well, needed to be adapted because of changes in local or national policies or of the organisation of care. For example, some patients were used to seeing their physician at certain time intervals, or were reassured by regular clinical tests, and were confused why these aspects of care changed.

Clinician: "Care delivery looks different these days. [...] You have of course been familiar with diabetes for a long time and it might be good to talk about how we organise care now. [...] Because what we look at more is, who needs which care and when. [...]"

If it is not needed at that time or not by me, but by the foot clinic [for example], then you are under treatment at the foot clinic. And in that respect, I am the one who keeps an overview of everything related to diabetes [...]." (Consultation 1)

In other consultations, patients and clinicians agreed to take no additional actions, either because the situation was satisfactory, needed further investigation, or because they decided that, due to the patients' personal, medical, or problematic situation to not further complicate diabetes care at that point in time.

Patient: "I think I will stay on the [insulin] pen for the time being. [...]"

Clinician: "That's totally fine. [...] It might be good, at another time to look with [specialised diabetes nurse] what the problem was [with a device]. If you ever want to go back. But the most important thing is, that you use the means that you find comfortable at the moment." (Consultation 19)

In some consultations, it was noted that care plans could be reconsidered and re-evaluated if needed.

Clinician: "Okay, we basically applied for three months and if you don't like it or if it's too burdensome, we can get rid of it [...]." (Consultation 7).

3.6. Consequences of making care fit

3.6.1. Theme 9: consequences for patients, clinicians, social networks and healthcare systems

In two conversations, patients provided arguments for why their care plan fits well with their situation and priorities, and what the impact of these well-fitted plans are:

Patient: "I am just better regulated than with the pump. [...] I feel good about myself and can do everything I want. And function well." (Consultation 4)

4. Discussion and conclusion

4.1. Discussion

This study aimed to confirm nine previously described dimensions of making care fit and to explore how patients and clinicians cover these dimensions in diabetes care. Our study confirmed eight dimensions as previously described by an international and interdisciplinary expert panel and an extensive literature review. We improve the understanding of the dimensions by offering real-life illustrations from clinical practice for each and by adding eight new sub-dimensions. Our data showed how in clinical practice, patients and clinicians collaborate by exploring aspects of patients' unique situation and their priorities, and by responsively changing, adapting or maintaining care plans.

We were not able to confirm dimension 8, on the importance of time and pace. We hypothesise that this dimension is difficult to observe, especially based on verbatim transcripts of encounters. This is suggested by findings of a recent systematic review that showed only 2 of 57 identified measures to assess time and pace were observer-based [11].

Our study has some limitations. This was a single-centre study, including a clinical team that has set person-centred care high on their strategic agenda. Choosing this setting of highly prioritised person-centred diabetes care offered a rich repertoire of behaviours that may contribute to making care fit. Thus, the extent to which our findings may be comparable to other healthcare settings, which may set other priorities on their strategic agenda, is unclear. Also, our study sample may have been biased by self-selection of clinicians and patients comfortable with having their conversations audiotaped. For example, if participants expected challenges in the conversation or in the collaboration to design care plans, they may have chosen to forego study participation, while these could have included exemplary or hindering behaviours relevant to making care fit. Our study also has some strengths. Two researchers with different professional backgrounds double coded all data, and discussed their codes with the interdisciplinary study team, enhancing reflexivity. Additionally, we included a heterogeneous sample of patients and clinicians, based on biomedical and relational characteristics, and patients' biographical characteristics. This provided us with a rich repertoire of behaviours in making care fit and complemented our study's holistic approach in both content and methodology.

This study contributes to the understanding of the concept of making care fit, which is conceived as a patient-clinician collaboration that results from explorative and adaptive care processes, made possible by favourable care structures (continuity of care, unhurried collaborations). Indeed, improving the fitness of care plans likely takes multiple collaborative approaches, showing overlap with aspects of other concepts on healthcare communication, e.g. person-centred care, or shared decision making – treatment selection based on patient preferences, respectful negotiation between conflicting positions, problem-solving – as was recently found [17]. Future research should focus on the (relative) contribution of the different dimensions to care plans that actually fit for each individual person, and on exploring the relevance of extant measurement approaches and interventions for improving the range of approaches in which patients and clinicians can collaborate to design care plans together [18,19].

While we used diabetes care as a case in our study, we expect that behaviours to make care fit are relevant to the care of almost all people living with chronic conditions. Further elaboration across other conditions will be necessary. In particular, additional work needs to consider the role of digital healthcare. We found a prominent role for electronic devices and digital communication in our sample, such as devices for (self) care, continuous monitoring tools, automated just-in-time interventions, but also in terms of the means of communication such as video support or asynchronous message exchanges [20–22]. We expect that digitalisation and blended care, in which traditional care models are augmented with digital medicine and artificial intelligence, will expand in the coming decade and therefore, it is important to incorporate these

digital developments in future research and initiatives to improve efforts of making care plans fit in real-life [23]. Notably, some of the patient-clinician encounters covered issues around adapting care due to changes in the organisation of care delivery. Making care fit as an outcome of care needs to be considered in the larger context of healthcare systems and organisations and the extent to which they contribute to create the conditions for care. In particular, efforts to improve the efficiency or value of healthcare may contribute or interfere with making care fit. Thus, subsequent research should focus on characterising the impact of these policies on the work of making care fit and on estimating the cumulative impact of making care fit on the value of healthcare [24].

4.2. Conclusion

This study confirms eight previously described dimensions of making care fit, and also provided illustrations from clinical practice showcasing how patients and clinicians enact these dimensions in real-life clinical care. In making care fit, we observed discussion of the unique situation, priority and lives of patients and efforts to modify and adapt care while establishing a patient-clinician relationship. Through practice examples, the concept of making care fit is specified and enriched with new sub-dimensions.

4.3. Practice implications

This study further describes and specifies the concept of making care fit, and anchoring it in the reality of clinical care. It equips clinicians and researchers with insights about aspects of the patient-clinician collaboration drawn directly from clinical practice. This increasingly complete understanding should contribute to shaping conditions for clinical care that favor the co-creation of plans of care that fit in the lives of patients and their loved ones.

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CRediT authorship contribution statement

Martha Kidanemariam: Writing – review & editing, Writing – original draft, Formal analysis, Conceptualization. **Matthijs A Graner:** Writing – review & editing. **Willem Jan W Bos:** Writing – review & editing. **Marielle A Schroijen:** Writing – review & editing, Conceptualization. **Eelco J.P. de Koning:** Writing – review & editing. **Anne M Stiggelbout:** Writing – review & editing, Conceptualization. **Arwen H Pieterse:** Writing – review & editing, Conceptualization. **Marleen Kunneman:** Writing – review & editing, Writing – original draft, Formal analysis, Conceptualization.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: M. Kunneman reports was provided by Dutch Research Council. M. Kunneman reports was provided by The Netherlands Organisation for Health Research and Development. M. Graner reports a relationship with The é éndiabetes Foundation that includes: board membership. A. H. Pieterse is associate editor at Patient Education and Counseling. W.J. W. Bos is chair of the working group on Chronic Kidney Disease at the International Consortium of Health Outcome Measurement and is co-chair at the Linnean Initiative. E.J.P. de Koning is council member at the International Pancreas and Islet Transplantation Association. M.A. Schroijen is chair of the working group on Recognizing Monogenic

Diabetes at the Dutch Diabetes Federation and member of the working group Harmonization of Endocrine Function Tests at the Dutch Association of Endocrinology.

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Confidentiality

I confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details of the story.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.pec.2024.108295](https://doi.org/10.1016/j.pec.2024.108295).

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