Tailoring advice and optimizing response: a case study of a telephone-based support for patients with type 2 diabetes

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Background and aims. Health care increasingly incorporates telephone counselling, but the dynamics of interactions supporting its delivery are not well understood. This paper explores how advice was packaged and received by participants with type 2 diabetes within the context of a Pro-Active Call-Centre Treatment Support (PACCTS) system delivered to provide diabetes self-care training over the telephone.

Methods. The data relate to nine participants who formed part of the qualitative evaluation within the intervention arm of a randomized controlled trial (n = 591) of PACCTS. One consultation call between the tele-carer and the participant was tape recorded towards the end of the 3-year study and each participant was interviewed by telephone within 24 hours of the consultation. The nine calls and interviews were transcribed and analysed using the constant comparative method.

Results. The type of advice the participants received was packaged in six forms: advice as explanation, general information-giving, generic advice, advice in the form of practitioner self-disclosure, personalized advice and responsive advice. Variation was evident in terms of the nature of advice provided, level of generality, form and context.

Conclusions. As the participants had to make multiple behavioural changes over time, advice needed to be delivered, reiterated and reinforced to achieve understanding and uptake. The more specific and personalized the information and advice, the more likely it was for the participant to give a positive and engaged response. Seizing every opportunity to deliver good quality personalized and/or responsive advice is essential in order to facilitate effective behavioural change.

Keywords. Behavioural change, giving advice, tele-care, type 2 diabetes.

Introduction

Achieving behavioural change in a chronic condition such as diabetes depends on a range of factors including patient perceptions of health and illness and effective communication with health care professionals. Traditionally, primary and secondary health care practitioners have encouraged patients to make behavioural changes through the provision of advice, either passively through leaflets or more actively combining information provision with direct persuasion. While this works for some patients, evidence on the effectiveness of advice about lifestyle changes is not strong, with success rates as low as 5–10% being reported. Over the last decade or so, a growing number of researchers in diabetes care have advocated a shift from the prevalent authoritative consulting style to the formation of collaborative alliances with patients, drawing on the philosophies of a patient-centred and empowering approach. These place priority on the practitioner working with the patient’s self-selected goals, providing knowledge and skills to develop a heightened patient self-awareness, with a view to enhancing control.

To follow through this philosophy and to promote self-care, existing research imparts two main messages. Firstly, the provision of information and advice must match the patient’s need for such information and advice, that is, given at times and in ways that fit with the patient and her/his carer. Secondly, the advice given must build on the patient’s concrete health experiences and encourage reflection on these experiences.
The process of giving advice is understood as involving packaging information in order to ‘forward’ or ‘promote’ a specific course of action.

The mechanisms of giving and receiving advice have been studied in many different health care contexts. For example, in medicines management, information leaflets tend to take the form of factual, non-personalized and direct information (on contraindications and side-effects); however, when asking what patients want, a ‘patient education’ and a ‘patient empowerment’ discourse are evident. In behavioural change interactions, advice can be presented in its more pure form or resemble a set of instructions that have been broken down into smaller component parts, each of which is delivered one at a time over a series of sequentially placed turns. The recipient is not inactive in this activity but will commonly repeat the instruction or utter a response such as ‘okay’ or ‘mm’ as an acknowledgement that they heard the information being given. These responses can on occasions be actively followed up by the practitioner to check understanding. Advice is also more likely to be taken up if it is personalized and specific to an individual’s illness and circumstances.

Against this background, this paper explores how advice was packaged and received by participants with type 2 diabetes within a Pro-Active Call-Centre Treatment Support (PACCTS) system delivered by two non-medically trained tele-carers supported by a diabetes specialist nurse. Interest lies in gaining insight into the process of giving advice within the tele-carer consultations in order to enhance understanding about how the intervention was valued by participants and how PACCTS achieved its desired aims, of better blood glucose control [using haemoglobin A1C (HbA1c) as a marker] and sustained diabetes self-care. The intervention was grounded in a behavioural change counselling model and the principles of a patient-centred consultation. At prescribed intervals depending on the level of blood glucose control, proactive calls were made to patients by the same tele-carer. Each call was scheduled to last for ~30 minutes. Its focus lay on increasing participant knowledge and understanding of diabetes and individual self-care elements (to monitor HbA1c, diet, exercise and medication adherence) and gradually developing a focus on more global self-management. The telephone interaction was guided by protocol-based and computer software-supported sections about knowledge of diabetes, readiness to make changes, medication adherence and measurement of glucose control.

**Methods**

**Participants**

The data relate to nine participants who formed part of a qualitative evaluation (n = 25) within the intervention arm (n = 394) of a randomized controlled trial (n = 591) of PACCTS, taking place within socially deprived communities. Participants for the qualitative evaluation, exploring the mechanisms of behavioural change and acceptability, were theoretically sampled from four groups according to changes in their blood glucose (HbA1c) results at the end of Year 1 of the intervention: those whose control remained either ‘good’ (HbA1c ≤ 7) or ‘poor’ (HbA1c > 9) (n = 13) and those whose control improved or deteriorated (n = 12), with equal numbers of men and women in each group as far as possible. The subset of nine participants, who form the focus of this paper, were chosen as they had prearranged telephone calls within the 1 month study period (at the end of the 3-year intervention) and reflected the four blood glucose (HbA1c) groups. Two of the participants had good control (a HbA1c level of <7%) throughout the intervention period, two remained poor controllers (a HbA1c level of >9%), three had changed status from poor to good (from a HbA1c level of >9% to a HbA1c level of <7%) and two had moved from good to poor (from a HbA1c level of <7% to a HbA1c level of >9%). There were six female and three male participants, including one male carer who took the calls on behalf of his disabled wife. Ethics approval was obtained from the local Research Ethics Committee.

**Data collection**

One set of tele-carer-patient telephone interactions was tape recorded by each of the four tele-carers with the participant’s permission towards the end of the 3-year trial (April/May 2005). All tape recordings took place within a 1-month period at a pre-agreed time. Each participant was also interviewed by telephone by one or other of the researchers as soon as possible after the interaction to explore perceptions of the call and the messages and advice provided. The tape recorded telephone calls were transcribed verbatim and checked for accuracy. The semi-structured interview schedule was jointly designed and a common agreed format was followed by each interviewer. Responses were coded and moderated by each interviewer and then exchanged and any discrepancies were resolved through discussion.

**Data analysis techniques**

Data analysis was iterative and guided by the constant comparative method. This involved the following: close reading of each transcript; highlighting instances of the giving of advice; developing a coding scheme that distinguished the different types of advice that were being offered to participants; tracking back through the transcripts to focus on the stepwise nature of advice delivery with a view to begin to understand why advice was packaged in different ways and to consider if this made a difference to participant uptake;
and, examining participant responses to the advice, looking for interational demonstrations of both understand ing and commitment to future action by the participant. Uptake was analysed by focusing on the responses that participants gave after advice was given. These responses varied from, for example, a very positive statement ‘yes, I will try/take that on board’ to utterances perceived by the researchers as conveying a positive or negative stance, for example, ‘yeah’, ‘umm’ and ‘ahah’. In order to analyse and interpret these responses, it was necessary to follow the stepwise delivery and uptake of advice to ascertain the subsequent direction of the conversation, as sometimes participants redirected the conversation back to the topic of the advice to ask further questions or the tele-carer sometimes reframed the advice after perceiving a limited uptake of their advice.

Results
The tele-care/patient interactions
Each of the recorded calls lasted an average of 30 minutes. The calls had five main phases. The first, introductory phase confirmed the participant’s identity and that it was a convenient time to do the call, ending with the open question ‘and how have you been?’ This smoothed transfer into the second phase centred on their most recent HbA1c result. Commonly, this was very short, involving praise of a good result. In the instances of a high result, this was followed up by the tele-carer or, as in one of the taped consultations, at the beginning phase confirmed the participant’s identity and that it was a convenient time to do the call, ending with the open question ‘and how have you been?’ This smoothed transfer into the second phase centred on their most recent HbA1c result. Commonly, this was very short, involving praise of a good result. In the instances of a high result, this was followed up by the tele-carer or, as in one of the taped consultations, initiated by the participant. The third phase formed the majority of the telephone interaction, lasting for about half of the call. These particular calls centred on the issue of diet, particularly carbohydrate, fat, fruit, vegetable and salt intake. Where appropriate, this was linked to the need for exercise and weight loss. Typically, it was in these sequences that information and advice would be given. The fourth phase involved the tele-carer collecting participant’s self-monitored and self-reported data on blood glucose levels. These levels were monitored throughout the intervention period by the specialist diabetes nurse and linked to those recorded in the annual, hospital or GP based, face-to-face patient diabetes review. In the recorded consultations, these data were not used to initiate the provision of more advice. The final fifth phase closed the call and arranged a further follow-up call.

Packaging advice
The way that advice was packaged took six forms: advice as explanation, general information-giving, generic advice, advice in the form of practitioner self-disclosure, personalized advice and responsive advice. Each is explored below.

Advice as explanation
A sequence was coded as ‘explanation’ if the advice given by the tele-carer was framed at both a general level and drew on very general public information or advertising campaigns. The information being conveyed, while perceived as credible and trustworthy, was not usually provided in a form that was personally relevant to the participant or tailored to their specific needs. Such sequences occurred in the context of a tele-carer (T) question arising from the script. In Box 1, the advice component is very general in nature, neither conveying risks specific to diabetes, nor ones related to the personal circumstances of this participant, nor providing recommendations for future behaviour or risk reduction. The participant responds quite defensively and dismissively (‘umm’ and ‘Mmmhmmm’). Most importantly, neither in the extract nor what follows is there indication of any commitment or explicit request for actioning the advice.

Giving general information
Giving general information is distinguished from explanation in that the advice is made pertinent or is relevant to the participant’s lifestyle in general. A common feature is the script-driven question and response and a missed opportunity to tailor the information-giving or gain ownership. In the sequence in Box 2, the participant gives quite a detailed response to a question about eating five fruits and/or vegetables. He highlights a preference for fruit and some changes towards having more vegetables. The tele-carer does not respond or pick up on this but delivers

<table>
<thead>
<tr>
<th>Box 1 Advice as explanation</th>
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<tbody>
<tr>
<td>Participant background: 65-year-old male participant, who has had diabetes for 15 or so years. During the 3-year intervention, his diabetes control worsened, his moving from originally being in good control of his diabetes to being a ‘poor’ controller. Initially, he was able to control his diabetes by careful attention to his diet but then had to move onto taking tablets.</td>
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<tr>
<td>T: Do you use salt at all in your cooking?</td>
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<tr>
<td>P: Pardon?</td>
</tr>
<tr>
<td>T: Salt? Would you use salt?</td>
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<tr>
<td>P: Salt, no, no. Just the minute little bit my wife uses, not . . . We don’t use a lot a salt. No, no.</td>
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<tr>
<td>T: Oh that’s good then. So you don’t use it on the table also?</td>
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<tr>
<td>P: Umm, well just a little, I’d say a little bit, not a great lot, no, no.</td>
</tr>
<tr>
<td>T: Okay, it’s just there has been quite a high profile publicity campaign actually highlighting people who have a high salt content in their food but that also increases the risk of you having high blood pressure. And there again high blood pressure, as I’ve said to you before, increases the risk of heart problems.</td>
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<tr>
<td>P: Yeah, yeah. Well I’m on blood pressure tablets.</td>
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<tr>
<td>T: Are you on the tablets? Okay, so you control the blood pressure then, haven’t you?</td>
</tr>
<tr>
<td>P: Mmmhmmm</td>
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T, tele-carer; P, participant.
Box 2  Advice as giving general information

Participant background: 58-year-old man who has had diabetes for ~8 years. He works shifts and had a lot of difficulty organizing his diet around his work. He also liked to go out drinking even though this had a detrimental effect on his diabetes control. By the end of the 3-year intervention, he had stopped drinking and was playing football and training in a gym. He moved from being a ‘poor’ to a ‘good’ controller.

T: And you said, fruit and vegetables. Did you try and have as near as possible to the five portions of fruit and vegetables?
P: I think with the fruit I’m having more than that! My veg, I’m a bit funny on my veg but I have been having some, yeah, yeah. But my fruit, I’ve been having bananas and kiwi fruits and stuff like that throughout the day.
T: Okay. Why we say that to you is we’ve got evidence with all the research work that it really is important that you try and have as near as possible to five portions throughout the day purely because of the vitamins and the fibre within your fruit and vegetables. They protect your blood vessels and they in turn protect your major organs from any other complications that you could be vulnerable to.
P: Right, yeah. Good stuff.

T, tele-carer; P, participant.

a general advice sequence relating to recommended levels and a rationale for these targets. The participant responds quite positively, without indicating a commitment to take on the recommendation.

Generic advice for diabetes self-care

Generic advice sequences involve giving advice focused on everyday self-care activities for good diabetes control. Common statements were of the form, ‘generally if you have diabetes it’s good to do this’. Often the way that generic advice was delivered and framed was to relate the advice to other people with diabetes. The advice was not personalized to the particular person nor delivered in a way to enable the participant to ask questions or present their own personal circumstances.

Box 3 provides an example for a poor controller. Initially, the questioning is personalized and specific reflecting back to a previous tele-care interaction. The tele-carer proceeds to reiterate the previous advice and links this again to a remembered context of having butter with vegetables. The generic advice follows and a simple and very short participant response results, ‘I understand’. However, while engagement is evident, no agreement or commitment to address the issue is indicated. Moreover, the tele-carer does not follow this up by exploring other ways of reducing fat in the diet but rather continues with the next scripted question, concerning salt intake. The nature of this interactive sequence is replicated across other participants irrespective of blood glucose ‘control’ status. Common features include the script-driven occurrence and response, with a seemingly missed opportunity for the tele-carer to tailor the information-giving to the individual.

Box 3  Generic advice for diabetes self-care

Participant background: 74-year-old woman who has had diabetes for 14 or so years. This lady also has renal problems and broke her ankle during the study period. This led to a phase where her diabetes was not being well managed. She was a poor controller at the beginning of the intervention and remained the same throughout its 3 years.

T: And what about fat in your diet, so things like . . . . What do you spread on your bread?
P: Oh, Lurpack (a brand of butter)!
T: Lurpack. I know you like butter don’t you. Mrs. (patient’s name)!
P: (Laughs) Yes I do!
T: I think like we spoke before in the . . . .
P: I have been more careful though since you’ve told me.
T: That’s right. I remember saying it’s a case of spreading it as thinly as you can.
P: Yes.
T: And I know you like to add it to your vegetables as well, your potatoes.
P: The potatoes, yes, with milk, I do like that, yes.
T: I think that’s it. As we know I mean especially with sort of fat in our diet to keep our cholesterol at the correct level so it is important not to have too much fat, isn’t it? And we know that.
P: I understand.
T: How much salt . . . . Do you actually use salt?

T, tele-carer; P, participant.

Personalize advice as practitioner self-disclosure

Self-disclosure by the practitioner is often used in behavioural change counselling as a way of normalizing a situation and reassuring the patient that the person giving the advice is aware of the difficulties and the enormous effort of making changes. The tele-carers used this strategy as a way of introducing difficult and sometimes sensitive topics like weight loss and exercise. In the study, the advice was embedded in a dialogue where tele-carers would empathize and describe their own personal difficulties with changing behaviour and, possibly, move on to describe a strategy that they personally had used and found successful, ending by suggesting that the participant may like to try to do this as well.

Box 4 provides an example of a participant who changed from being a good to a poor controller. It centres on the possibility of physical exercise for the participant. Following the participant’s indicating she also walks at work (up and down the stairs ‘as much as possible’ ‘except maybe first thing in the morning’), the tele-carer gives positive feedback and asks for more details while at the same time disclosing to the participant that the tele-carer also likes to walk and the possibility of walking ‘after your tea’. The participant agrees quite enthusiastically with all the comments. The tele-carer continues by describing the positive physical benefits of increasing exercise. It is notable that this way to give advice involves a suggested way to do a particular kind of behaviour to help incorporation into the person’s lifestyle.
### Box 4 Personalizing advice as practitioner self-disclosure

**Participant background:** 58-year-old woman who has had diabetes for 4 or so years but whose diabetes control has worsened over the duration of the intervention study. This lady has a family history of diabetes and so she was not surprised to be diagnosed. Prior to the intervention, she did not regularly monitor her blood glucose through the day. Although she identifies she has a better understanding of her diet, she still treats herself to sugary snacks.

**T:** Do you find that you are able to . . . Do you walk quite a bit or . . . ?

**P:** No, it’s near home. I live quite close to the park. But when I’m at work, I’m on the fourth floor and I walk most of the, quite often, well, most of the time really. I walk up and down the stairs except maybe first thing in the morning when I go up in the lift. But on two days a week I do the post and I have to go down to the ground floor to the post room so I usually walk down and then walk up again.

**T:** So you get your bit of activity in the day at work by at least moving from your desk and having a walk, which is good, isn’t it?

**P:** Yeah, well, I used to, I try to use the stairs as much as possible rather than the lift. Would you tend to go out at lunchtime when the weather gets a little bit better? Would you have a walk or do you not have much time?

**P:** I don’t really have much time, it’s usually after work, it’s usually when I get home we go for a walk.

**T:** Yeah, and I think you know, sort of, not this weekend, the one after when we move the clocks forward, it means at least . . . I mean it’s something I like to do after work, you know, after your tea, you can have a little walk, can’t you?

**P:** Yeah.

**T:** Because it’s a nicer time to have a walk then, I think. If it’s light till about eight o’clock we get that chance to do that then really, don’t we? Rather than sit there after our evening meal?

**P:** Yeah.

**T:** Yes, so that’s great. Obviously it’s important to keep active because that again lowers our blood pressure and you know improves the circulation and at the same time for you it’s regulating your blood sugar levels as well, isn’t it?

**P:** Yeah.

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### Box 5 Personalized advice

**Participant background:** 53-year-old married woman who has had diabetes for >13 years and also has had a stroke. During the study, she moved from being a ‘poor’ to a ‘good’ controller. Her husband looks after her and together they talk to the tele-carers. The husband speaks to the tele-carer, as due to her stroke, she has difficulties talking. As she is in a wheelchair, issues of weight and exercise can be problematic.

**T:** And I know you can’t weigh her, but do you think she has stayed about the same?

**C:** Oh good, well, that’s now, you’ve sort of reduced the portion sizes, that will help as well, won’t it?

**T:** Yeah.

**C:** Yeah.

**T:** And I mean, I know it’s hard when she can’t be so active. Because you do need the exercise combined with diet, don’t you? But at least if she is, if you are reducing the portion sizes, eventually it will pay off and she will lose some, won’t she?

**C:** Yeah.

**T:** In view of the problems that she has as well, I think she is doing fantastically well really.

**C:** Yeah.

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**Personalized advice**

Personalized advice is tailored to the participant’s personal circumstances and preferences. It commonly occurred in response to information obtained from the participant via the scripted protocol. It was also linked by the tele-carer to other background and logged information elicited in previous interactions. Examples included the participant’s living arrangements (being on their own, type of job and work shifts) and personal likes and dislikes.

Box 5 illustrates this form of giving advice in an interaction focusing on weight and weight loss. Throughout, the advice is personalized, for example empathizing that loosing weight is difficult given the participant’s mobility problems and putting weight loss in perspective (benefits will come ‘even if she just loses a couple of pounds’). The tele-carer closes this part of the interaction, praising both the carer and the participant for their efforts and providing positive reinforcement. The elicited response from the carer is positive with a verbal commitment to keep going in the longer term. A later sequence in the same consultation, focused on the topic of blood sugars, exhibits similar features: praise offered by the tele-carer on the reduced HbA1c, linking her advice to their previous discussions about eating healthily and problem solving in relation to eating sugary food over Easter-tide. The sequence ends with a positive response (commitment to positive action) with the carer agreeing and acknowledging the advice given.

**Responsive advice**

Responsive advice is personalized and tailored to the individual participant and was given as a response to a question from, or statement/piece of information given, by the participant. Giving advice in this way needed to be done skilfully by the tele-carer, especially when the advice related to a previous dialogue between...
Box 6  Responsive advice

| Participant background: a 74-year-old woman who has had diabetes for 14 or so years. This lady also has renal problems and broke her ankle during the study period. This lead to a phase where her diabetes was not being well managed. She was a ‘poor’ controller at the beginning of the intervention and remained the same throughout its three years. | T: Right.  
P: And this morning my blood glucose level was 8.6.  
T: Yes.  
P: And 12.4 at lunch.  
T: Well that’s . . . (high)  
P: Now what I can’t understand, I’ll never understand it . . .  
T: Yes.  
P: I’m eating more or less the same things everyday; I mean I’ll have chicken and my two veg and my potatoes or meat, a lamb and two veg and potatoes.  
T: That’s the main meal of the day? That’s the main meal at tea time. And that’s at tea time?  
P: Yes. At breakfast I have my porridge every morning.  
T: Porridge. You do.  
P: Now at lunch I’ll either have a soup or a sandwich.  
T: Right.  
P: Now that is more or less the same thing everyday but they vary so.  
T: That’s right and they always seem to be rather high in the middle of day don’t they, before all your all meals?  
P: Yes.  
P: I know you have sort of pieces of fruit sometimes in the afternoon because I think we’ve discussed this before haven’t we? You had an orange.  
P: But I don’t have it in-between meals so that’s what I’ve been doing after my meal.  
T: That’s right but what I was saying is a good time to have your fruit is at the end of your meal, so after your lunch and you’ve been doing that, haven’t you?  
P: Yes I’ve been doing that.  
P: And you don’t eat any cakes or biscuits in-between those meals do you?  
P: No I just have my two rich teas at night.  
T: Right. What, obviously looking at those as we can see we’ve got a good pattern to look at that and the main ones that do seem higher are in the middle of the day and they are a little bit unexplainable if you are doing the right things.  
P: Yes, I can’t understand it myself.  
T: Let’s let [name of diabetes specialist nurse] have a look at these today I’ll pass the call onto her . . . she always looks at the blood sugars.  
P: Uh huh. |

T, tele-carer; P, participant.

the tele-carer and the participant. Here, the tele-carer had to piece together a picture of the participant’s circumstances and build the advice thereupon. Otherwise, the advice would have taken a more generic form.

Box 6 provides an example for a poor controller. The participant queries why his blood glucose readings have been consistently high around lunchtime. At first, the tele-carer provides a minimal response; the participant continues to offer more information about lunchtime eating habits. The tele-carer then probes for yet more detailed information, by asking about breakfast time. The participant soon reasks her question, searching for an explanation as to why her control is not better. The tele-carer now offers some personalized advice (the right time to eat fruit and biscuits), but this is refuted as an explanation by the participant (she insists she is doing this). Being unable to offer another explanation, the tele-carer decides to seek help from the diabetes specialist nurse. The sequence illustrates both how a participant can ask for information or explanation in quite subtle ways and the way the tele-carer tries to provide personalized advice in response. In this case, although the consultation itself did not to resolve the problem, useful advice and verification of knowledge for the participant resulted and a way forward was agreed to enable problem resolution.

Discussion

The findings demonstrate the different connotations of and patient response to providing advice. Variation is evident in terms of the nature of advice provided (its source—publicity campaign versus self-disclosure), level of generality, form (generalized or personalized) and context (script generated or in response to a patient enquiry or tele-carer self-disclosure). The six forms or ways of giving advice lie on a continuum, from ‘explanation’ at a general level to ‘personalized’ and ‘responsive’ advice. The more specific and personalized the information and advice, the more likely it was for the participant to give a positive and engaged response. Again, a continuum was evident; responses ranged from none or minimal, a small acknowledgement in the form of ‘mmm’ to mild engagement (‘yeah’), positive signalling (‘yeah oh yes, good idea’ and ‘oh, I didn’t know that’) and into agreement to act (‘I’ll try that’).

Several features were common across the transcripts. Firstly, even though the tele-carers were following the same protocol, they varied their question phrasing. While the protocol was generally closely adhered to, if a topic came up earlier, the tele-carer was flexible and gave the participant space to follow it through. This approach enabled advice to be given responsively, leading to a heightened likelihood for participant engagement. Secondly, the six ways of giving advice were commonly used within the same consultations. This illustrates the tension between a professionally oriented patient education discourse, in contrast to an ‘empowering’ approach. Thirdly, it was rare for tele-carers to build on their data collection of up-to-date blood glucose levels and use this opportunity for problem solving, to give advice, to summarize and to set goals.

Even in this small set of taped consultations, occurring towards the end of a 3-year support and advice intervention, information-giving was not always specific or personalized. The result can be lower levels of engagement and limited uptake of the advice. In a behavioural change context, personalized and/or responsive
advice might be expected to be at the forefront. Similarly, one might expect each consultation to end with a summary of the advice given, an attempt to set realistic goals with the patient and, critically, to seek the patient’s agreement to sign up to try out the advice in a specific time frame. However, this rarely occurred in these consultations.

Limitations of the study
The findings are based on a small subset of participant and one telephone consultation within the wider context of a set of consultations that took place over a 3-year period, thus limiting generalizability. However, the sample was purposively chosen to explore the experiences of participants with different blood sugar control profiles and included four different tele-carers, maximizing opportunity for potential insight into styles of giving advice. Further work is needed to confirm the occurrence and use of these different ways to give advice and to explore how use of these forms may change from consultations early on in an intervention to those at later times.

Conclusions
Giving advice is a central component of any chronic disease behavioural change consultation. The aim must be to pursue ways to maximize uptake. This study has demonstrated that the way information and advice is given makes a difference to the level of engagement and potential uptake of that advice. Given the complex set of multiple behavioural changes that a condition such as diabetes requires for effective self-care, advice needed to be delivered, reiterated and reinforced over time to achieve understanding and uptake from the participant. Such an approach needs to work alongside a focus on the participant’s needs and readiness to receive and act on advice and to focus on the types of advice that will maximize uptake. Seizing every opportunity to deliver good quality personalized and/or responsive advice seems essential if effective behavioural change is to be facilitated and achieved.

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Declaration
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