Dear Editor,

Thank you for the opportunity to respond to the reviewers comments on our article. We are pleased that the reviewers only had minor or discretionary points for us to address. We have reproduced the reviewers reports below and make point by point responses.

We hope that the manuscript is now acceptable for publication.

Yours sincerely,

Martin Eccles on behalf of all authors.

Reviewer: Jeremy Miles

COMMENT

This is a very comprehensive and well written paper, describing the iQuaD study. Only minor comments.

RESPONSE

Thank you; no further response needed.

COMMENT

Minor Essential Revisions

I don’t think it’s necessary to give correlations for two items, and alpha for more than 2. There’s no reason (I know of) that alpha can’t be given for a two item test.

RESPONSE
We agree that there is no technical reason why we can't calculate Cronbach's alpha for a two item scale. For a two item scale Cronbach's alpha will always be higher than the Pearson correlation coefficient. This probably comes down to an issue of choice/preference. It is not uncommon for researchers to report a Pearson correlation coefficient for two item scales, rather than a Cronbach’s alpha. However the reason for choosing one or other is not set in stone. We have used Pearson correlation coefficients because of the number of items – two. Longer scales are in general more reliable. So if you have say six equally "good" items in a scale they will have a higher Cronbach's alpha than a scale that has three of them chosen at random. So it is "more difficult" for a two item scale to have as high a Cronbach’s alpha as a longer scale. In the light of all of this we have left this unchanged.

COMMENT

P21: PrincipAL components analysis, not principle.

RESPONSE

Thank you – corrected.

Reviewer: Atle Fretheim

COMMENT

This is a first report from a larger study where the aim is to explore factors that influence the quality of the clinical management of patients with diabetes – with an ultimate goal of using the research findings to design interventions strategies that will improve the health in this patient group.

The current report is of limited interest on its own, but will serve as important background information for future publications that are expected from this project - in my mind. The manuscript is long, but well-written. It is very detailed and comprehensive, but this contributes to transparency for the research project as a whole. It will likely be read only by other researchers working in this developing research area, but may be of significant use to them. The authors’ explicit invitation to other researchers to collaborate and get access to their data is laudable.

RESPONSE

Thank you; no further response needed.

COMMENT

I have no major or minor compulsory revisions, only a few discretionary.

In summary:

- The question posed by the authors seems new and well defined.
- The methods were appropriate and well described insufficient detail.
- The seem data sound.
- The discussion and conclusions are well balanced and adequately supported by the data.
- The title and abstract accurately conveys what has been found.
- The writing acceptable.

RESPONSE
Thank you; no further response needed.

COMMENT
Discretionary revisions:
The Background section focuses almost solely on the need for developing a theoretical basis for implementation-research in this area, but as far as I can see the larger project is about more than that. I was a bit puzzled by this and perhaps you could start your background-section a bit "wider", before "narrowing down" and addressing the need for more use of theory and how the study may contribute to that - if you agree that you are actually exploring other determinants than those that are theory-based (at least regarding the organisation issues I think you are looking at other attributes than those that deal with various cognitions).

RESPONSE
Reading the Background again we agree the introduction could be seen as somewhat “abrupt”. In order to deal with this (whilst also being conscious of the fact that the manuscript is already long) we have added the following 76 word opening paragraph.

“There is an enduring interest in healthcare in how best to predictably improve the quality of care received by patients. Different researchers approach this issue in different ways using different methods informed by a range of disciplinary backgrounds. Implementation science is the (usually multi-disciplinary) study of those factors that promote the uptake of the findings of clinical research into routine healthcare, thereby improving care for patients; it includes the study of both individual and organisational factors.”

COMMENT
P. 6. In bullet point 2 for data collected at 12 months, you may want to point out that the data was extracted from the medical records - for clarification (since I assumed, but was not sure, this was the case when I read it the first time!)

RESPONSE
The reviewer’s assumption is correct. We have amended the bullet point from: “Physiological, biochemical and drug data and clinician diabetes management behaviours on all patients with diabetes managed within the participating primary care practices” to read:

“Physiological, biochemical and drug data and clinician diabetes management behaviours from practice computer systems on all patients with diabetes managed within the participating primary care practices”
COMMENT
P. 8 You want to, already here, explain the reader who the telephone interview was conducted with.
RESPONSE
We have clarified by amending:
“A structured interview schedule was developed to collect details from each practice about practices’ structures and functions (see Additional file 1) both in general and in relation to the provision of care for patients with type 2 diabetes.”
To read:
“A structured interview schedule was developed to collect details from a nominated study contact in each practice about practices’ structures and functions (see Additional file 1) both in general and in relation to the provision of care for patients with type 2 diabetes.”

COMMENT
P. 15. The QOF-data was a bit confusing to me. It was not mentioned earlier, and it is not clear in the text where the data comes from (before it is entered into the QOF-database). Is it based on electronic medical records, patient feed-back, or what?
RESPONSE
Thank you for highlighting our lack of detail here for a non-UK reader. We have added the following sentence to the relevant section.
“The data are extracted from practice computer systems by the local primary healthcare administrative authority on an annual basis using a standard data extraction query.”

COMMENT
P. 17. "half day session" is a concept I do not know or understand, so it would be good to provide a brief explanation.
RESPONSE
Thank you for highlighting our lack of detail here for a non-UK reader. We have amended the first occurrence of this phrase from:
“There was a mean (sd) of 5.4 (2.7) doctors per practice covering a mean (sd) of 36.4 (20) half day sessions and providing a mean (sd) of 515 (315) appointments per week.”
To read:
“There was a mean (sd) of 5.4 (2.7) doctors per practice covering a mean (sd) of 36.4 (20) half day (notionally 3.5 hour) sessions and providing a mean (sd) of 515 (315) appointments per week.”

COMMENT
P. 19. TPB and SCT-abbreviations are only used once, so you might as well spell
it out here too.

RESPONSE
We agree and have used the full versions in the text at this point.