Author’s response to reviews

Title: A Mixed-Methods Approach to Understanding Partnership Experiences and Outcomes of Projects from an Integrated Knowledge Translation Funding Model in Rehabilitation

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RESPONSE TO REVIEWERS AT BMC HEALTH SERVICES

Thank you very much for the reviews you sent us. They were very constructive and contributed to improve the clarity of the paper and the transparency of the methods used. Our response to every comment is included below with the corresponding page number in the manuscript where changes have been made. Changed sections are in red in the manuscript.

Reviewer 1

1a) "The references have to be updated. There is only one reference from 2016 and another from 2017. There are not references from 2018 or 2019."

Thank you for this helpful suggestion. We added the following seminal recent papers on IKT to the background (of which four are from rehabilitation*):
1. Anaby et al., 2017*

2. Taflampas, Kilbride, Levin, Lavelle, & Ryan, 2018*

3. Shikako-Thomas et al., 2018*

4. Jull, Giles, & Graham, 2017

5. Bird et al., 2019*

6. Kothari & Wathen, 2017

7. Gagliardi, Kothari, & Graham, 2017

Background section, lines 87 to 103, page 3

1b) "The reference [1] related to a wiktionary does not seem very scientific."

The Wiktionary reference was removed; we replaced it with a more credible source.

The section now reads: “outcomes will be defined as the intended and unintended consequences of an event, process or program (1)”


Before the background section, lines 83 to 85, page 3

1c) "In page 6 is exposed that "Open-ended responses were independently analysed by two student researchers using thematic analysis". I think that additional information should be included about this process. How the discrepancies were resolved? Decision conferencing or another methodology were applied? How the third reviewer participated? Additional information about this third reviewer and the two student researchers is required, academic degree research line, experience, etc. How the categories were created?”

Thank you for this comment. We added additional information to clarify the process used to analyse the open-ended responses from the survey. Specifically, we added details regarding the process of handling discrepancies through discussion and by a third reviewer.
We also appreciate the reviewer’s suggestion to mention the credentials of the student researchers. We added that the authors were professional master’s students in the occupational therapy program and were supervised by a PhD professor and expert in KT research.

The section now reads:

Two student researchers (professional master’s students in occupational therapy, supervised by a PhD professor and expert in KT research) independently coded open-ended responses using conceptual content analysis. Discrepancies were resolved by face-to-face discussion and a third reviewer, who independently coded the select open-ended responses, was invited for final consensus.”

Methods section – under quantitative analysis, then data analysis, lines 157 to 161, pages 5 and 6

1d) "A practical example of application of ID methodology would be very interesting to the reader."

Thank you for this suggestion. For the purposes of this paper, we believe that providing a practical example of ID methodology would lengthen the manuscript substantially. ID is a methodology that requires a sophisticated analysis including rigorous, interpretive, cross-comparisons in an iterative manner during and after data collection. This process is described on lines 198 to 205 of the manuscript and key references on ID have been provided.

We have provided an additional file (#4) as an example of the ID coding process

1e) "The qualitative information recorded from interviews (page 7) is difficult to analyse and sometimes can be interpreted in a way or another depending of the person that analyse the information. This can be an important problem. I think that the authors should explain if that is a limitation of the research or some actions has been applied to avoid the problem. How the open coding process was carried out. Please provided an example."

We appreciate the reviewer’s comment and added more detail on the double-coding process. The section below (lines 198 to 205 of the manuscript in the qualitative analysis section of methods) describes how the open coding was executed.

The section reads: “Transcripts were coded independently by two researchers who piloted the coding techniques on an interview to establish a similar coding frame. The analytical process included a constant and iterative review of the data, guided by questions aimed at identifying coherent narratives and themes (29, 31). An open coding process was done at the paragraph and
statement level of the transcripts. Open codes were then grouped into overarching themes. Visual representations of the codes and themes were arranged onto storyboards. Numerous iterations of analysis were performed, which involved repeatedly asking questions such as “what is going on here?” and “what am I learning about this?” in order to identify coherent narratives rather than lists of descriptive categories (31). Analysis was concluded when all members agreed that the coding book represented the data collected.”

Methods section – under qualitative analysis, then data analysis, lines 196 to 205, page 7

1f) "The questions of the survey were original or based in literature? I think that there is insufficient information to repeat the methodology by other researchers or health care organizations."

Thank you for this comment. We added details to explain who developed the survey and how. The survey items were originally developed by the research team to gather information related to the research objectives (i.e. to describe the projects, the outcomes and the partnership).

The section now reads: “The research team developed a 20-item survey to gather descriptive information on the nature of the projects, the outcomes and the partnerships (see additional file 1). The survey consisted of six open-ended items, 12 closed-ended items and 2 items scored on a 5-point Likert scale within four sections: 1) general information, 2) study outcomes, 3) impact and sustainability, and 4) reflection on the partnership. For instance, two open-ended questions were designed to elicit participants’ perceptions of both the project’s expected impact and actual impact. Seven members (clinicians and researchers who are experts in KT) of the ES steering committee then reviewed it for clarity, length and appropriateness of the items. Revisions were made accordingly. The survey was administered online using LimeSurvey (26)."

Methods section – under quantitative analysis, then survey development, lines 143 to 144, page 5

Reviewer 2

2a) "However, one focus group with only 6 researchers may not have been sufficient to reach saturation and more topics may have remained unexplored."

We appreciate the reviewer’s concern about saturation and offer the following explanation in addition to indicating this as a potential limitation. Our focus group comprised a total of six researchers. Though this was one focus group, it was comprised of researchers with experience and expertise in KT and in leading IKT projects with clinical partners.
We added the following in the limitations section:

“Despite the level of experience of most researchers in the focus groups, one group of six researchers may not have been sufficient to reach saturation.”

Study limitations section, lines 518 to 519, page 19

2b) "Figure 2 offers an interesting comparison between expected and actual impact. Original in principle. However, it is unclear from the methods how 'actual' impact was measured/assessed or defined by investigators to build this graph. Perhaps the word 'actual' should be reconsidered. Readers would benefit from a statement about this in the methods (i.e. self-perceived on the basis of….), in addition to the comment on the limitations section."

We appreciate this suggestion and have added a statement in the methods section explaining more explicitly how the “actual” (and “expected”) impact was assessed. “Expected” and “actual” impact were assessed with open-ended questions on the survey which were then analyzed with content analysis by two independent coders.

We added the following in the methods section:

"For instance, two open-ended questions were designed to elicit participants’ perceptions of both the project’s expected impact and actual impact."

We also included a statement in the limitations section to clarify that these responses are from the perception of the survey respondents and may not reflect true impact.

We added the following to the limitations section:

"The results regarding expected and actual impact in figure 2 represent the impact from the perception of the survey respondents and may not reflect actual impact of the project."

Furthermore, the description under figure 2 clarifies that the actual impact is self-perceived: “a comparative bar graph displaying what principal investigators expected to see as an impact of their research project versus their perception of the project’s actual impact.”

Methods section – under quantitative analysis, then survey development, lines 147 to 148, page 5

Study limitations section, lines 513 to 514, page 19

2c) "A gap that needed addressing was the perception of the less senior researchers about the partnership experience. These people are the crucial link in the chain that make outcomes happen and they were overlooked in this particular study. This needs to be acknowledged in the
limitations of the study. Perhaps a sub-study could investigate their views and uncover some other issues of relevance."

We appreciate this comment as we hadn’t provided an explanatory hypothesis concerning the “less senior researchers” which we assume are the graduate students and post-doctoral fellow project leaders. Their contribution to the process and outcomes of their IKT projects is distinctive and important given that they represent 47% of the project leaders. Indeed, a subsequent study could explore the impact of their participation in such projects.

We added the following to the limitations section:

"Though participation of graduate students and post-doctoral fellows in IKT projects is substantial and represented 47% of project leaders, their specific contribution compared to that of clinician project leaders was not explored in this study."

Study limitations section, lines 520 to 521, page 19

2d) "The emerging finding of the need for more widespread use of measurement frameworks and tools is an important one to obtain concrete evidence of success in IKT. However, the statement that there was insufficient time to measure long-term impact (line 396, page 15) may not be correct, since was one of the criteria for inclusion in the study (line 174, page 6) and the definition of sustainability encompasses 2+ years of initial implementation (line 408, page 15)."

Thank you for this suggestion. We revised the sentence accordingly and omitted this statement: “an insufficient period of time to measure long-term impact.” It was indeed an inaccurate statement given our inclusion criteria.

Discussion section- under impact and sustainability, line 397, page 15

2e) "It was unfortunate that only 2 studies measured long-term impact and sustainability; and that few explored patient-oriented outcomes. I agree with the finding that decision-makers need to be included among the stakeholders consulted to ensure viability and sustainability. They should be the sponsors and champions promoting the intervention to motivate wider participation.

Perhaps authors could emphasize in their recommendation for the grants agency to incorporate this in the funding requirements for future grant awards, alongside their suggestion to fund projects longer than 12 months (as mentioned in lines 486-490, page 19) to allow time for 'robust and strategic preparation' that enables the culture of KT to set in."
Thank you for bringing up these important suggestions. We have emphasized in the implications section that decision makers must be included from the beginning of IKT projects.

We have added the following underlined text in the implications section:

"Funding agencies should consider revising their eligibility criteria to include the participation of clinical directors or decision-makers."

Implications section, lines 497 to 498, page 18

2f) "While it is true that student participation as project leaders is not ideal, the suggestion that full-time clinicians should be the PLs (Lines 471-474, page 18) represents the end of a spectrum, which is not necessarily realistic (Table 5 shows this).

If there is no organisational support quarantining time for clinicians to be involved in research (let alone be project leaders), then this recommendation is made in a vacuum. It would be important for authors to include a sentence about how they propose that clinicians become PLs/collaborators given the existing barrier.

Thank you for this important comment. We added the following to the implications section:

"We suggest that initiatives supporting researcher-clinician partnerships consider and address the organizational barriers associated with involving a working clinician. A collaborative approach that leads to mutually beneficial considerations needs to be established. This can include the number of allotted clinician hours, roles of clinical directors or decision makers in the project and solutions for sustainability of the project and the partnership."

Implications section, lines 495 to 497, page 18

2g) "Finally, the assertion that sustainability plan should be based on existing theories and models is a bit abstract. Sustainability needs to be grounded on using locally relevant resources, customizing policies, and educating staff on the benefits of readiness to change."

Thank you for what is an excellent suggestion to enrich our implications section. The section now reads:

"A context-specific sustainability plan for the innovation should be explicitly documented and reviewed by the funding agency. We suggest that this plan be grounded in sustainability theories and models, and include a statement on available local resources, relevant policies and the commitment of stakeholders."

Implications section, lines 480 to 483, page 18