Author’s response to reviews

Title: Program theory development and formative evaluation of a provincial knowledge translation unit

Authors:

Denise Thomson (dthomson@ualberta.ca)
Stephanie Brooks (stephaniebrooks@ualberta.ca)
Megan Nuspl (megan.nuspl@ualberta.ca)
Lisa Hartling (hartling@ualberta.ca)

Version: 1 Date: 28 Feb 2019

Author’s response to reviews:

Dear Editors and Reviewers,

Thank you very much for reviewing our manuscript and offering your thoughtful comments for improvement. We have revised the manuscript in response to the reviewer critiques. Below you will find our revisions for each comment from each reviewer. The revisions are also colour coded in the manuscript (blue for responses to Reviewer 1, red for Reviewer 2). Thank you again. We look forward to hearing from you.

Reviewer 1

1) Include a definition of program theory in the background section

We included a definition of program theory beginning at line 111 which now reads, “Program theory is the product of, “making explicit the underlying assumptions about how programs are expected to work” [11] which can then be used to guide the evaluation of program function and impact.”

2) A thorough re-read as there a number of spelling and grammar errors throughout the manuscript
We have followed your suggestion and given the entire manuscript a close copy-edit to catch remaining typos and grammatical errors.

3) Check for first use of abbreviations in full and update the list of abbreviations

We have checked the first use of all abbreviations and updated the abbreviations accordingly. To note, we do have the full word for Strategy for Patient-Oriented Research, Support for People and Patient-Oriented Research and Trials, and knowledge translation followed by abbreviations twice as one set is in the abstract and one is in the main body of the manuscript. As people may refer to either the abstract or the main document without referring to the other, we wanted to clarify abbreviations in both.

4) Add the month and year of the initial interviews

At line 124 we have added that interviews were held between October 2014 and February 2016.

5) Lines 236-242 confusing - could you define who participants are? how are they different from clients?

Pardon the confusion. In the methods we stated that interviewees for the formative evaluation were either KT experts acting in advisory capacities to the KT Platform or clients who had used KT Platform services. We have added a statement in the results clarifying that clients were interviewed for the evaluation. That sentence reads, “While yielding desired results in terms of patient outcomes, consultation in itself did not equal KT capacity building in the KT Platform clients interviewed for the evaluation."

Reviewer 2

1) Program theory development, capacity, 4C model would need some more explanation as concepts.
For program theory development, please see response #1 for Reviewer 1.

For capacity we introduce the various capacities in KT from line 102-104. We’ve added a sentence to the paragraph to clarify that these are indeed the capacities required to conduct KT. This sentence reads, “The breadth of activities involved with KT is coupled with an equally broad field of potential practice and capacity requirements depending on which element of KT is being performed.” We also follow up with more explanation in the discussion with an explicit list of examples of capacity starting at line 279. This passage reads, “However, remembering that KT encompasses knowledge synthesis, mobilization, and implementation, the breadth of required capacity complicates any one initiative’s ability to offer comprehensive capacity-building programs. For example, those working in knowledge synthesis need knowledge and confidence in information science and database searching. Their work also often requires skills in statistics to bring together results from multiple complex studies in meaningful ways. Conversely, individuals working in knowledge mobilization benefit from understandings of social science. They also require experience using various media to formulate evidence-based messages that reach different stakeholders in ways that are understandable and meaningful. Finally, those in knowledge implementation have skills in organizational culture and management, as well as in program design and evaluation. This is by no means a comprehensive list of capacities required to successfully perform KT activities; therefore, it is not surprising that gaps in capacity-building efforts persist [19, 22, 22].”

For the 4C model we have clarified that this was a model specifically built for the KT Platform and is not an established model in the field. The passage in the results describing the model (starting at line 165 now includes, “To ensure that both overarching and distinct needs were met, the KT Platform created what we called a ‘4C Model’ to guide its operations (Figure 1). The 4C Model was developed to meet local needs for capacity building, a community of practice, consultation services, and contributions to KT science. Rather than operationalizing any existing models of large-scale KT initiatives, the 4C Model is the product of a community-based approach that meets the needs of the local context, which the KT Platform was designed to serve.”

2) The discussion and conclusion give the impression that practitioners should learn to synthesize and appraise research evidence. Is this realistic? These activities are rather demanding academic tasks and the co-creation of best practices etc might better succeed if academic text are re-written (by brokers? etc) into more practical tools. At least for strong arguments on what practitioners (or researchers/brokers) should do, some empirical research evidence would be needed to support the arguments.
This is an excellent point and we have clarified that our consultation services do include taking over some of these demanding tasks when appropriate. We added this clarification in the results (lines 217-224), “Consultation is especially important for demanding academic tasks, such as knowledge synthesis, evidence appraisal, and program evaluation design. Depending on the needs of a given client, consultation activities operate on a spectrum from simple advising to embedding a KT Platform staff member into a health science/service team for a period of time. At the latter end of the spectrum an embedded KT expert can help to build capacity by providing on-site experiential training to team members or they may conduct a piece of work as appropriate. For example, a KT Platform statistician regularly performs meta-analysis for teams that would not need a statistician more frequently.” We also added a statement about an embedded expert in the first paragraph of the formative evaluation (line 248) that says, “For example, one of the participants represented a project the KT Platform supported with an embedded KT expert to co-create a strategy to implement a new therapy, basal bolus insulin therapy, to improve in-hospital management of individuals with diabetes.” Finally, we bring this up again in the discussion at line 321 to remind the reader of the ability to embed KT experts when appropriate, “The variety of KT activities and ongoing needs stated across the literature, and in our own results, highlights the need for the KT Platform to continue development and delivery of varied training opportunities as well as consultation services with the ability to embed experts into project teams.”

3) The discussion part does compare own results with some other studies in Canada, though one would expect somewhat wider discussion in the light of the international literature. Canada has created a very supportive environment and has proved rather ample funding for KT; is Canada a special case in this field? Naturally this mostly qualitative small scale study is not meant directly to provide generalizations. However, the readers of the journal come from around the world.

You are correct that we cannot make any generalizations from our study. However, broader explorations comparing KT efforts across countries does support the power of KT programs organized in similar ways to SPOR. We have added a citation and expanded the discussion around KT funding and program organization. At line 297 after talking about another Canadian KT study, we added, “A broader report compiling KT efforts from 15 countries worldwide to identify strategies to strengthen KT also found that lack of sustainable funding impacts the success of KT efforts [26]. Along with Australia, the United States and other countries in Europe, Asia, and South America, Canada was highlighted in this study for its advanced KT landscape. This study found that, “to be fully effective, policies and programs to encourage increased research translation need to be part of a stable national innovation strategy and administered by an independent agency” [26 p.15], similar to the SPOR program in Canada. With national and provincial funding for the SPOR program, the KT Platform is uniquely.
positioned to test how funding and mandate, as repeatedly called for in the KT literature, impact a community's ability to increase KT to support patient-oriented research.”