Author's response to reviews

Title: One size does not fit all: A qualitative content analysis of the importance of existing quality improvement capacity in the implementation of Releasing Time to Care: The Productive Ward^TM in Saskatchewan, Canada.

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Author's response to reviews: see over
Dear Professor Gagnon,

Thank you for the opportunity to revise and resubmit our manuscript: **One size does not fit all: A qualitative content analysis of the importance of existing quality improvement capacity in the implementation of Releasing Time to Care: The Productive Ward™ in Saskatchewan, Canada (MS: 1039583630122019).**

We welcome all of the reviewer’s comments and appreciate their feedback. Please find enclosed our response to the reviewer’s comments. We have addressed the comments in the following pages and provided a response to each. In the response to each comment we include line numbers to indicate where in the manuscript the changes occur.

We look forward to hearing from you again.

Yours Sincerely,

Jessica Hamilton
Health Quality Council, Saskatchewan
Reviewer Louise Parker

Discretionary Revisions

1. Suggest the authors provide a more extensive review of the literature on Organizational Readiness. For example see Christian Helfrich and colleagues work.

   On line 102 we have referenced a number of frameworks that exist and explore the contextual and initiative-specific factors important for successful QI work. We have included a reference to the PARIHS framework, which, Helfrich and colleagues’ Organizational Readiness for Change Assessment is based on. The focus of this manuscript is on the context in which QI initiatives are implemented and there are many frameworks that consider the elements that must be addressed prior to engaging with QI work. We use the Organization for Quality framework to explore various factors of context important to address prior to beginning QI work.

2. Suggest the authors use the active rather than passive voice whenever possible.

   We appreciate this suggestion. As suggested by the reviewer we have edited many statements to be written in the active voice rather than the passive voice. Examples of these edits include:

   The United Kingdom National Health Services (NHS) Institute for Innovation and Improvement developed RTC in 2005 and 2006 and first implemented it in the UK in 2007. (Lines 133-134)

   Twelve units volunteered to participate as initial demonstration units. (Lines 141-142)

   Each health organization identified the medical and surgical units assigned to each implementation wave. (Lines 144-145)

   We utilized semi-structured interviews to answer the study’s research question. (Lines 161-162)

   The consent letter noted that participants could withdraw at any time during or after the interview. (Lines 177-178).

Minor Essential Revisions

3. Why is QI in quotations?

   In response to the reviewer’s recommendation (see below #5) we have restructured the background section and this statement has been removed.

Major Compulsory Revisions

4. Background section of abstract: Need to make clear the purpose of the program from the onset and what organization is implementing it.

   We have changed the wording of the abstract to reflect the reviewers wording suggestion, with some additional clarification. See lines 49-51.

5. Similarly the background section of the manuscript is not clear about what is the purpose of the study. The authors begin by writing about spread then move directly to writing about a specific program without reference to spread. There seems to be a missing logical link here. I suggest that
the authors begin with a clear statement about broad issues, then a description of RTC, and then followed by what this study will address that is new.

We have clarified the background information to reflect the reviewer’s suggestions.

On line 78 we begin this section with a statement about the broad issues. This research study is unlike a traditional research study in which an issue is identified and an intervention trialed to explore the issue. In our situation, an intervention was implemented in Saskatchewan, Canada through a government initiative. This ‘natural experiment’ facilitated an opportunity to consider a number of factors within the implementation of the program. A research team and a number of research questions were developed, which allowed us to conduct a research project alongside the implementation of a QI initiative.

We go on to note that the implementation of the QI program allowed us to consider the impact of RTC on a number of outcomes, including the short-term effect of RTC on the quality improvement capacity of hospital units. Additionally, the provincial-wide adoption of one QI program into multiple environments allowed us to consider the impact of unique context on the implementation of RTC. It is the same program implemented in various environments in the province and we hypothesized that implementing an identical program across units would result in variation in the engagement with and success of the program, due to variation in existing context into which the program was being implemented.

We continue this discussion in the discussion section of the manuscript and highlight how the findings from our study add to the literature related to the importance of considering unique microsystems when implementing system wide initiatives (lines 600-609).


We appreciate the suggestion by the reviewer and we recognize the importance of a critical evaluation of Lean.

The scope of this manuscript pertains to the impact of the implementation of Releasing Time to Care in Saskatchewan. RTC was an initiative implemented by the government of Saskatchewan. The research team did not choose to implement RTC as an intervention to test an idea and research question. The government initiated it and a research team was subsequently formed to conduct a research project alongside its implementation. We have included facts related to Lean insofar as they relate to the RTC program. For example, RTC is a QI program based in Lean methodology (see line 85) and continued adoption of RTC in Saskatchewan was halted as the government chose to implement a more wide-scale Lean transformation program.

As the government made the decision to end RTC and begin implementation of a provincial wide Lean transformation another research team has formed to evaluate the Lean journey in Saskatchewan alongside its implementation. Such research will include an assessment of the evidence for Lean.

7. Prior context: You cannot address prior context with this design.
The reviewer raises an important point regarding the limitations of addressing prior context. We recognize these limitations and discuss the potential for recall bias in asking interviewees to speak of the unit environment prior to RTC (see lines 647-649).

A main research question for this study was to examine the impact of existing QI capacity within the pre-RTC unit context on implementation of the program. As noted in the description of the data collection (lines 183-194) and further seen in the attachment of the interview guide (additional file 1) we did ask interviewees to comment on the environment on the unit prior to RTC implementation. These results are presented in the pre-RTC context section of the results (lines 243-273 and lines 376-422). The interpretations of results regarding pre RTC context are based on interviewee’s comments. Many of these comments speak to objective comments of pre RTC context (ex. education days, online learning modules, physical layout of the unit).

Reviewer John Wells

Major Compulsory Revisions

8. Referring to line 133 in the original manuscript submission: When was it tested? This is important as the dates don’t appear to collate accurately.

We have edited the manuscript to include an explanation of when RTC was tested [see lines 141-142] and have re-checked the manuscript to ensure accurate reporting of the dates (see below).

9. Referring to line 137 in the original manuscript submission: This needs further clarity, eg. did everyone who volunteered get to start? Is there a possibility that some didn’t get to start and are including within this study group? It would be important to know how participants were nominated/volunteered?

We have edited the manuscript to include an explanation of how demonstration test units were selected [please see endnote 1]. We have also included an explanation of how units for the provincial roll-out were selected after the government mandate was in place [see lines 144-145]. Additionally, we have included a figure [figure 1] that highlights the time frame for when units started RTC.

10. Referring to line 362 in the original manuscript submission: The timelines as presented here to look credible, in relation to the implementation of five modules in the time line described.

11. Referring to line 448 in the original manuscript submission: Again the timelines don’t add up. Sept 2011-May 2012 = 8 months.

12. Referring to line 475 in the original manuscript submission: Its stated that the unit ended RTC in December 2011, having only started in Sept. 2011. Again some explanation is required or there an error has been made in reporting the time lines.

In reference to the above three major compulsory revisions (10-12) we have included a figure (figure 1 – additional file) that highlights the time frame for when each unit started RTC.

To clarify, the results in the manuscript focus on 2 units:

Unit B started RTC in wave one in September 2010. At the time of the interviews (May 2012), they had completed all of the RTC modules and were actively continuing with RTC activities.
Unit E started RTC in wave two in January 2011. They stopped doing any RTC modules in December 2011 (they spent approximately 12 months doing RTC activities). Therefore, at the time of the interviews in May 2012 they had not been working on RTC at all for 5 months (Dec. 2011 – May 2012).

We have reviewed the manuscript to ensure that all dates are reported correctly. The only unit that started implementing RTC in fall 2011 (specifically September 2011) is Unit C. This is not one of the units that is discussed in detail in the manuscript but is included in table 2.

Minor Essential Revisions

13. Referring to line 76-78 in the original manuscript submission: This statement is not necessarily true in ALL QI projects, it is however said to be true for all QI start-ups.

In response to suggestions from reviewer one, we have revised the language of the background information to clarify the intent of the research. Please see response to revision #5 above for a more detailed explanation to our changes to the background information. In our revisions the above mentioned statement (referring to lines 76-78 in the original manuscript) has been excluded.

14. Referring to line 85 in the original manuscript submission: RTC was developed in 2005 & 2006 and launched in 2007. On a number of occasions in the manuscript the authors make this error (eg. 131).

We have clarified the wording of the language in the manuscript to reflect the proper timelines.

Lines 87-88: Wording changed to RTC was implemented in the United Kingdom in 2007.

Lines 133-134: Wording changed to The United Kingdom National Health Services (NHS) Institute for Innovation and Improvement developed RTC in 2005 and 2006 and first implemented it in the UK in 2007.

15. Referring to lines 86 in the original manuscript submission: Only reference 11 alludes to any other international implementation outside of the UK.

We have edited the manuscript to clarify this section. On lines 87-88 we have clarified the placement of the references to correctly align with the information. Reference 9 and 10 refer to the development of RTC and reference 11 refers to the international implementation of RTC.

16. Referring to lines 115-120 in the original manuscript submission: Material presented here would look so much better in a graph or table so the reader could keep referring back.

We appreciate this suggestion. We have created table 1 and included a description of the Organizing for Quality framework in this table.

17. Referring to lines 125 in the original manuscript submission: Please indicate what type of analysis.

Please see lines 127-128. We have changed the wording of the text to include the type of analysis: We performed full qualitative content analysis on all 8 units; however the results presented here focus on describing the QI capacity of the pre-RTC environment and the impact of RTC on 2 units.
18. Referring to lines 159 of the original manuscript submission: Defining the grades/professions/ward teams within the Saskatchewan system is important to help international readers understand the background context of staff as well as providing organizational detail.

   We have included an endnote to explain the staffing makeup of nursing units in Saskatchewan. Please see endnote 2 at the end of the manuscript (immediately before the references).

19. Referring to lines 161 of the original manuscript submission: Some more detail required in relation to the criteria used for purposive sampling, particularly as it is referred to as an issue in the limitations.

   Additional detail as to how interviewees were selected is addressed on lines 168-175.

   There were 4 to 7 interviews conducted on each unit, for a total of forty-eight interviews. To identify potential interviewees, we contacted individuals from each unit who were in a leadership position and familiar with the staff. The contact person was asked to identify staff from the unit who had been actively involved with RTC and with staff who had been less active, including those who did not support RTC. Additionally, at the end of each interview, the researcher asked each interviewee if there was anyone else that had been a supporter or resistor of the program that we should speak with. Using this snowball sampling approach ensured we included staff with a variety of perspectives on RTC (see Table 2 for a list of interviewees from each unit).

20. Referring to lines 214 of the original manuscript submission: The reader really needs to understand why only 2 were chosen and what criterion was used?

   We have added additional detail as to why only two units are highlighted in this manuscript (Please see lines 229-233).

   The results and discussion focus on 2 illustrative units, B and E. We chose these units to highlight very different examples of QI capacity in the existing context and the subsequent impact of the RTC program. Additionally, we were limited to the number of units that we could fully report on due to limitations in publication length. Though the results presented here focus on units B and E, we have included quotations relating to the pre-RTC context of units A,C, D and F-H in additional file 2.

21. Referring to lines 218 of the original manuscript submission: Should this not be part of the ‘Sample’ section?

   Similar to the descriptive statistics tables that often accompany quantitative studies we feel that it is appropriate to include a table at the beginning of the results section of this manuscript that provides an overview of the subjects (lines 225-228). We have also highlighted why we are focusing on 2 of the 8 units that full qualitative analysis was performed on (lines 229-233).

22. Referring to lines 233 of the original manuscript submission: ‘Knowing How You’re Doing’ needs further explanation for the non-RTC reader.

   We have included an endnote that provides more detail of the Knowing How You’re Doing module. See endnote 3 in the endnote section and the end of the manuscript (immediately before the references).
23. Referring to lines 239 of the original manuscript submission: This piece needs some re-structuring, perhaps by using subheadings from the framework as it is very difficult to follow.

We appreciate this suggestion. We have edited this section to add clarity to the presentation of the results. We identify the framework domain name associated with the specific results being discussed with bold font. Additionally, for each of the two units described in detail, the results section is divided into pre-RTC context and RTC impact. We feel that adding more subheadings would result in a fragmented results section, decreasing the flow of the narrative. As per the reviewers previous section we have also described the domains of the framework in a table in the background information (table 1), which should serve as a key reference for the reader as well.

24. Referring to lines 552 of the original manuscript submission: The authors need to explain what a ‘readiness grid’ is or provide an example and reference it.

We have provided more detail as to the readiness grid:

RTCA contains an eight item checklist (readiness grid) around areas of leadership, competing priorities and staff relationships and although it is meant to be considered before beginning RTC, it was not mandatory in Saskatchewan’s implementation of RTC, nor was any formal process put in place for using it. See lines 564-567.

25. Referring to lines 577 of the original manuscript submission: Why transformational leadership?

We have clarified this section to include a more broad statement on the type of leadership we are referring to and that is described in the literature. See lines 593-596.

26. Referring to lines 714 of the original manuscript submission: Reference is incomplete.

We have edited the reference to include the DOI. This article was published as an e-publication in January 2013 and is not yet included in a print version of the journal. There is no volume, issue or page numbers. See line 730.

27. Referring to lines 748 of the original manuscript submission: Reference appears incomplete.

We have edited the reference to include the DOI. See line 764.