Author’s response to reviews

Title: Targeting Adaptability to Improve Medication Therapy Management (MTM) Implementation in Community Pharmacy

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Targeting Adaptability to Improve Medication Therapy Management (MTM) Implementation in a Community Pharmacy


Editor Comments

This is well presented study, on a topic that is both clinically important but also has potential to further advance the science of intervention adaptation.

--We thank the Editor for their comments and kind words.
Your introduction is totally US focused, yet the Journal has global readership. Please edit the text to cover MTM in a global context. Is it equally relevant? If not, what is to be learned from this study that is applicable to an international audience?

--Thank you for this feedback. We have explicitly stated which MTM details are US-centric. Further, we added a cited statement about MTM growth internationally (p6):

--“Internationally, MTM is also growing. For example, a recent survey in Europe found that 44% (11 of 25 countries surveyed) provide adherence-focused MTM services, while 24% (6 of 25 countries surveyed) provide comprehensive MTM services similar to those in the U.S.”

I felt there is an inbalance in the study reporting, in that the results focus mostly on the impact of the educational programme; yet the primary aim of the study was the development of the adaptability framework. I would thus invite you to reorder the methods, such that the MTM adaptability framework comes first - as based on your report the intervention was embedded within this framework. We also need more detail regarding precisely how the framework was developed and 'validated' - is this something the research team came up with, for instance based on the sources cited on pp 12-13? Or should we take the educational intervention and its impact as evidence that the framework actually 'works'? If this is the case, which elements of the framework does the training address and which does it not impact on? We need conceptual clarity on this element of your research.

We thank the editor for this insightful feedback and agree with the suggested changes.

--We have reordered the methods so that the development of the framework is within the methods section and then the reporting of how the framework looks in the results (p10-12).

Related to the above point, there is an argument here for outlining the procedure for the development of the framework in the methods and then reporting what it actually looks like as a first phase of the results; I’m leaving it to you to consider how best to restructure methods/results to make the framework development element more prominent in the paper.

--Thank you – the authors agree with these comments (see above for further clarification). The framework is now reported in the results as this study is where the ‘validation’ occurred (p16-19).

In your Discussion you focus quite a lot on diffusion, but somewhat less on implementation strategies. Can you comment further please on how your approach compares with existing implementation strategy frameworks (eg from the ERIC group), which may or may not have been fully applied if course to MTM to-date?

--Thank you for this suggestion. We have described how our intervention aligns with the ERIC implementation framework and have provided suggestions for future research on additional implementation strategies to support MTM (p25-26).
Lastly, apologies for the delay in reviewing your submission, which is quite unusual for the Journal.

--This was of no concern to the authorship team. We are grateful to the Editor for their consideration of the publication for their audience, as well as their thoughtful feedback which has greatly improved the quality of the manuscript.

Reviewer 1 Comments

Thank you for the opportunity to review this paper. I found it of particular interest given that I also work with Kroger and have worked to improve implementation of MTM.

--We thank the reviewer for their kind words and for their unique perspective given their collaborations with the study organization.

This project was very interesting and addresses an important issue in community pharmacy (and pharmacy in general). I thought that the approach to teach pharmacists and staff a different way to look at and approach MTM in the community pharmacy was unique. My understanding is that the project centered around helping pharmacists identify the level of service that needs to be provided. Many times pharmacists may use an "all or nothing" approach, and this framework or "way of thinking" sought to help pharmacists have a more tiered approach to delivering MTM services. While I really like this approach and think that it is very interesting, it did take me reading the paper a couple of times to make it clear what the project was and how everything fit together. I have a few suggestions that will hopefully help clarify the project during a first read of the paper for future audiences.

--The reviewer has accurately summarized the intent of the paper. Given the complexity of the project and its theoretical underpinnings we welcome the reviewer’s feedback to improve clarity.

Abstract:

Objectives: the objectives identified in the abstract vs. the manuscript to not seem to fully match. In the manuscript, the "development of the framework" is cited as an objective, but the development of the framework is not truly described. Looking at the impact of the educational intervention using the framework and pharmacists' perceptions of MTM/self-efficacy seem to be the true objectives of the research. It would be helpful to have the objectives in both places match.

--We thank the reviewer for their comments and agree with their concern. We have rearranged the methods and results to more accurately represent the objective: which was to develop and present the framework (p10-12).

Manuscript:
Background: I think that the majority of the background does a good job setting the stage for what MTM is, why it is important, what adaptation is in the context of implementation science (IS), and how IS has been used to address issues with MTM so far. I think that the second paragraph could provide some more specific examples of the problem to really tease out what you guys are trying to address.

--Thank you. We have provided such an example in the introduction to improve readability and understanding (p7-8).

To me, these sentences:

"Importantly, the Core Elements framework "does not represent a specific minimum or maximum level of all services that could be delivered by pharmacists."20 Furthermore, although the use of the five elements are required, the delivery of these elements may vary by setting" really start to get at the meat of the issue---the fact that we don't have specificity of what LEVEL of service should be delivered and that it is likely dictated by setting (as well as the other inputs/outputs you identify in your framework). I think that this is a key sentence, but I missed what you meant during the first read. The next sentence, I think, attempts to explain and give an example, but it might be more useful to give an even more specific example like you do later in the paper: perhaps what a community pharmacist may do in a situation vs an am care pharmacist.

--Thank you for this insight. We have first created a paragraph break at this sentence to highlight its importance for the reader. Then, we outline a more specific example in line with the reviewer’s comments (p7).

Methods: Interventions and Strategies

The 60-minute webinar: was this an interactive webinar or more lecture based? I see that there were case examples, but did the participants have a way to ask questions or do any type of active learning. Also, how was the framework presented to the pharmacists? Was it presented more at a high-level as discussed here in the manuscript, or were examples used? I think it would be helpful to include such example in the manuscript to further explain the usefulness of the framework.

--This has now been clarified within the description of the educational program: “The educational intervention was a 60-minute live training webinar with active learning components that was jointly developed by university researchers and organizational leadership to provide guidance to community pharmacists on adapting the delivery of the Core Elements to a Community Pharmacy setting.” We have also added a description of the use of the framework in the training and an example of how the theory was applied to real world practice (p13).

MTM Adaptability Framework:
pg 12 line 4. I think a word is missing: "In particular, it does NOT create a new MTM service - rather it.."

--Thank you for catching this oversight, we have corrected this (p10).

The supplement at the end of the manuscript is a great example of how to use the framework, which I think is what is missing from the description of the framework in the manuscript. It would be helpful to refer to the supplement during this section to help the audience fully grasp how to use the framework.

--We have added additional references to supplement 1.

Semi-structured interviews

What were the open-ended surveys from?

Would it be possible to include the interview questions as a supplement? I am curious as to how the questions were asked to the key informants.

--Thank you. A copy of the semi-structured interview guide has been included as supplement 2

Results:

Is it possible to include the raw numbers rather than just the % increase? I realize that this may not be allowed by Kroger, which may be the reason the authors did not include it.

--We agree with the reviewer that this would have been ideal. However, as the reviewer surmised our data sharing agreement with Kroger prohibits the release of “raw numbers” other than percent increases.