Reviewer’s report

Title: Facilitating action planning within audit and feedback interventions: A mixed-methods process evaluation of an action implementation toolbox in intensive care

Version: 0 Date: 17 Jun 2019

Reviewer: Miriam Bender

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Overall: a well-articulated study that provides information about how an action plan toolbox works to help translate information from A&F into action plans. However, the fact that the action plans were not implemented at any different rates was not discussed in detail, which for me makes me wonder at the efficacy of the toolbox in general. But if the goal was to provide toolbox mechanisms of action, this study did that: perhaps better articulating this goal from the very beginning will help readers who may just be looking for efficacy data.

Introduction: well done, although I notice theories introduced in the introduction and different ones used for the actual study, so that can be confusing. Also could you describe what 'pain management performance' consists of?

Methods: So control theory was used to develop the toolbox, but CP-FIT was used to evaluate the toolbox and determine how the toolbox was used? Is there a reason? The figure of the model is difficult to interpret related to the concepts of audit/feedback, pain management, and the modifier of action planning: does action planning interact with the feedback display? Also, were coders blind to the group that the excerpts/data came from? Otherwise methods were well described.

Results: So pain management performance at START of trial was lower for intervention group, or after? The results were complete and descriptive without really helping to understand what the action plans were. Table 2 was very helpful in interpreting the text. How this all related back to the audit/feedback was not well specified. The barriers to action planning seemed sometimes to be more about barriers to pain management in general (ability to change pain medications); it would be helpful to better specify what result is related to what element of the study: pain management, audit and feedback as the strategy to implement pain management, and action planning as a modifier of audit and feedback. And are you stating that a study procedure (interview phone calls) was actively taken up as a factor promoting implementation actions ("the telephone interviews stimulated most ICUs to keep reviewing their feedback, reinforce actions that had stagnated, and update their action plans")? If so I would like to see this addressed in the methods and limitations section.

Discussion: If I am interpreting correctly, audit and feedback does not have a stable effectiveness on its own, and action planning may be a tool to help translate the data from A&F into a plan for action. But your findings showed it did not help in putting the plan INTO action. And the context of the ICU was stated as a major factor, yet it is stated that "more efforts are needed to facilitate
health professionals in this translation [of plan to action]" rather than changing contextual factors to make it easier for health professionals manage pain. Although you did mention this as a potential strategy in the very end: i.e. change RN authority to prescribe pain medication. You suggest this as an action plan, but isn't it more of a context change? I mean, it moves away from clinicians' scope of action to the organizations' scope of action in setting parameters for practice.

Implications: Thank you for mentioning the context change as an additional target for action. You did not discuss the self-determined actions: the fact that this happened in both groups mitigates the results described (i.e. toolbox is effective), or at least should be addressed in terms of the potential efficacy of the toolbox selected plans vs self-selected plans. For example, did the "low effort" activities represent self-selected plans?

Strengths: yes, this study did a good job articulating HOW a toolbox can be efficacious in the context of A&F. I am glad you mentioned the interview calls as potentially limiting transferability of findings.

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