Author's response to reviews

Title: A Case-Based Approach to Shared Decision Making Skills Training for Clinicians

Authors:

Robert J Volk (bvolk@mdanderson.org)
Navkiran K Shokar (navkiran.shokar@ttuhsc.edu)
Viola B Leal (ybenavidez@mdanderson.org)
Robert J Bulik (bob.bulik@gmail.com)
Suzanne K Linder (sklinder@mdanderson.org)
Patricia Dolan Mullen (patricia.d.mullen@uth.tmc.edu)
Richard M Wexler (rwexler@imdfoundation.org)
Gurjeet S Shokar (Gurjeet.Shokar@ttuhsc.edu)

Version: 3
Date: 22 August 2014

Author's response to reviews: see over
Dear Editors:

We greatly appreciate the time and detailed guidance offered by the two reviewers of our manuscript. The paper has been revised significantly. A tracked version has been included to facilitate consideration of the revision, plus a clean version. Our responses to the reviewers’ comments are below. Thank you for considering our revision.

Response to reviewer, James Dolan

Major compulsory revisions

1. The study’s conclusions need to more closely reflect the results. Currently, the results are interpreted as showing that the case-based method improved primary care clinicians’ knowledge and confidence in the SDM process and their intent to implement SDM in practice. However, only about 75% of the study subjects who were not decision aid users, arguably the primary target audience for an educational intervention like this, indicated that they intended to engage their patients in SDM. Results of assessments of subjects perceived ability to help support patient decisions were similarly middling. It is unclear from the current manuscript what a reasonable threshold is for determining a successful intervention and if this threshold was determined a priori. The paper would be significantly strengthened if this information was included.

Response:

This point is well-taken. We did not propose an a priori threshold for determining success of the intervention, and have recast the manuscript as a pilot study with the goals of assessing the acceptability of the case (how well it met the learning objectives, ratings of the case’s features) and obtain initial data on knowledge of SDM and confidence in preforming SDM.

Another significant limitation that is not sufficiently incorporated in the discussion is that the study was conducted in a volunteer sample. It is highly likely that the results are better than would be expected with other clinician groups due to selection bias.

Response:

This is another excellent point. The following sentence has been added to the limitations section of the manuscript (last paragraph in Discussion).

“As this was a volunteer sample, the findings may be more favorable would be expected with other clinician groups due to selection bias.”

2. It appears that this study only covers 2.5 levels of the Kirkpatrick model, not 3. A strength of the study is the use of a formal evaluation framework. However, there is a big difference between expressed confidence and intentions immediately after a training intervention and actual implementation down the line. This limitation should be highlighted more than it currently is.

Response:
We agree completely with this concern. We therefore have made the following changes to the manuscript.

Table 1 now indicates that Behavioral Level was not directly assessed, and we only collected ratings about confidence in the decision and plans to preform SDM behaviors.

The Section Design, Measures, and Analysis Plan (second paragraph) include the following modified sentence:

“Ratings of confidence in performing the SDM behaviors (response options “very,” “somewhat,” and “not confident”) and plans to perform SDM behaviors with patients in the future were also included in the evaluation, although they do not provide a direct assessment of the behavior level (response options using a five-point Likert scale ranged from “much less likely” to “much more likely”).”

Finally, the limitations paragraph (last paragraph in the Discussion) has been revised to read as follows:

“Finally, our study addressed the first two levels of Kirkpatrick’s evaluation framework (i.e., reaction and learning) while considering changes in clinician behavior through self-reported intentions to perform SDM.”

3. The manuscript focuses too much on a very preliminary evaluation process and not enough on important theoretical and developmental contributions. Right now, the focus of the manuscript is on a rather limited evaluation of the case-based method. This approach minimizes two more significant outcomes/implications of the study: 1) the rationale and argument for using a case-based approach in the first place and 2) the conceptual model that was developed. I think the manuscript would be much stronger if there was additional discussion of: a) the role of a case-based approach to SDM education, including information about other existing approaches that have been utilized (based on the search that was done) and whether this is the first case-based SDM training program or not, and b) the use of the conceptual model to guide SDM education initiatives. In addition to additional discussion within the manuscript, I think these two issues are important enough to be highlighted in the study conclusions.

Response:

We appreciate these comments and have made the following changes to the manuscript.

First, we expanded the Background and Discussion sections to develop a stronger rationale for the case-based approach to teaching SDM skills. Second, we have added a new paragraph to the discussion addressing the conceptual model we developed and highlighting its role in guiding SDM training programs in the future. (See pages 18-19)
Response to reviewer, France Légaré

Major Compulsory Revisions
This is an interesting paper. However, I have few suggestions and questions.

Response:

Just a general comment that we greatly appreciate the time and clear guidance the reviewer has offered in preparing this revised manuscript.

1) Title: I suggest the authors reflect on adding a statement about the content of their paper: for example, development and feasibility of….; or pilot testing of a …… .

Response:

This is an excellent suggestion. The new title of the paper is “Development and Pilot Testing of an Online Case-Based Approach to Shared Decision Making Skills Training for Clinicians”

2) Abstract: In its current format, the abstract is not very informative.

a. As mentioned above, please consider modifying the background section to indicate clearly that you developed and pilot tested an online educational program using a case based strategy.

b. The methods section is clearly under developed. I would move out from this section any results (e.g. 49 clinician members) and add to the results section.

Overall, this section should inform the readers on:
i. Study design and type of sample: e.g. cross sectional and convenient sample; also, it would be possible to also refer to a multipronged study with three phases: 1) review of SDM training programs, models and measurements systems; 2) development of the case to be embedded within an online program; and 3) pilot testing
ii. Participants: inclusion criteria and recruitment strategy
iii. Intervention: Online educational program
iv. Data collection: self-administered questionnaire
v. Data analysis

c. The results section should be modified accordingly:
i. Response rate
ii. Data should be provided and any interpretative statement should be removed (e.g. knowledge of SDM was high) and replaced by the study results (e.g. score from Table 2)
d. The conclusion should be modified accordingly: this is a cross sectional study, only post intervention data; therefore, it is not recommended to conclude that the participants improved their knowledge and confidence since we have no baseline data. I suggest the authors simply state that they provided a detailed report on the development of an online educational program using a case based strategy and pilot data indicates that participants found completing the online program feasible and achieved high scores. However, we do not know if they improved (no baseline data) and future studies are needed to assess its impact.

Response:

The Abstract has been largely rewritten based on this guidance. We like the subheadings proposed, but in checking the author instructions from the journal we have to retain the major headings. We were able to address each of the points of information within this structure.

3) It would be useful if the authors would provide a clear definition of case-based learning to help readers distinguish it from other educational methods

Response:

Also in response to the reviewer’s comments above, we expanded the Discussion (page 18) to include more information about case-based learning and its role in health professional education.

4) Methods section: Overall, this is a difficult section to follow as there were multiples phases included in this study design. First the authors review the literature of SDM training programs, models and measurements systems. Second, they elaborated a SDM process model. Third, they elaborated a case to be embedded within an online training program. Lastly, they pilot tested the online training program. This type of complex multipronged studies are always difficult to report on since, each phase could be the topic of one single paper. Therefore, it may be impossible to provide all the details needed to appraise the rigor within each phase. However, if this is to be understood to be a report of the development and pilot testing of a new program, I believe this type of paper needed to be encouraged.

a. I suggest to consider the following structure:

i. Study design: this is a multipronged study with three phases: 1) review of SDM training programs, models and measurements systems (they may want to include one more phase: development of the SDM process model); 2) development of the case to be embedded within an online program; and 3) pilot testing

ii. Phase 1: review of SDM training programs, models and measurements systems and development of the SDM process:
   1. Sources and identification of clinician SDM competencies
   2. Data Abstraction
   3. Data Analysis
   4. Quality assessment (was it done? if not why?)
5. Synthesis: this is where the SDM process model is devised

iii. Phase 2: development of the case and of the online training program; it would be useful to have access to some of the material: screen shots or access to the training program or to a demonstration DAC from this company.

iv. Phase 3: pilot testing:
1. Participants and recruitment; this is a convenient sample
2. Intervention: done above
3. Data collection
4. Data analysis

Response:

Again, we greatly appreciate the guidance from the reviewer in making these important revisions to the presentation. We believe these changes greatly improve the readability of the study. We considered publishing the phases as separate papers but felt the project could be presented effectively in a single paper. The suggestions from the reviewer are very helpful, and the following changes have been made.

Overall, the Methods section has been restructured to include three phases on this project. An introductory paragraph is included, based on the reviewer’s suggestion, to better orient readers to our approach.

We do not have a public access version of DAC. We have included a link to the DAC website home page where interested readers can learn more about the product.

5) Discussion section:

a. Add limitations to be discussed: this is not a study design that can be used to assess the impact of the program; therefore I am not convinced that the authors can refer to the Kirkpatrick evaluation framework and say that they have addressed its first two levels; they have used this evaluation framework to guide the choice of their questionnaire but have not addressed evaluation per see.

Response:

Non-comparative study designs are not uncommon in educational research, in part because it is very difficult to find large enough samples to randomize learners individually to different intervention groups. We have modified the limitations to more directly address the study design:

“Finally, our study addressed the first two levels of Kirkpatrick’s evaluation framework (i.e., reaction and learning) while considering changes in clinician behavior through self-reported intentions to perform SDM. The design did not include a control or comparator intervention.
Additional, comparative research is needed to determine the effect of competency training on clinician-patient interactions and deliberation in promoting informed, shared decisions.”

6) Overall comments: This study is about testing the acceptability and feasibility to use a case based learning strategy embedded within an online training module to teach SDM to healthcare providers. The authors would thus enrich the knowledge base of such innovation by adding the following information: responses rates of targeted individuals and follow up throughout the pilot study; completion of the online training program (%); modalities of completion of the online training program (log one or more than one time) etc.

Response:

Thank you for this observation. We added information to the Abstract and Results section about the number of volunteers for the study and how many completed the case. Aside from asking clinicians about use of the supplementary information provided via hyperlinks (63% used these links), we do not have data on number of log-ins, length of time on each section, etc.