

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Supporting the management of type 2 diabetes with pharmacist-led reviews: an observational analysis
AUTHORS	Langran, Tim; Nanda, Nithya; Bataveljic, Attia; Gonzalez-Durio, Javier

VERSION 1 - REVIEW

REVIEWER	Shirinsadat Badri Isfahan University of Medical Sciences, Isfahan, Iran
REVIEW RETURNED	10-Sep-2016

GENERAL COMMENTS	<p>Thanks for such a valuable study. I've put my comments on the attached file. However, to state some here:</p> <ul style="list-style-type: none">- The word "practice" which is highlighted in Yellow throughout the text, better to be replaced with the word "practitioner" or sth like this.- Abbreviations should be expanded or defined at the first time of appearance in the text.- The "Introduction" part needs Major revision regarding its content as stated below:<ol style="list-style-type: none">1. You are required to briefly explain the 9 NICE-recommended keys in this part. As the reader go through the text, the phrase of nine keys is repeated several times; however, it was kept obscure till the "Results" part. It's better to describe it briefly in the "Introduction" part.2. You are required to refer to the background of the setting which you performed your study there. I mean, you need to describe the present status of diabetes care in this setting, and the pitfalls which you planned to do the corrections for. In the "Introduction" part, you need to prepare the reader mind for the necessity of performing this study.3. Also, referring to the similar previous studies and their results, is necessary for the "Introduction" part.4. Also, the "Introduction" part needs Major revision, regarding grammar and English writing and editing.- Other parts of the manuscript need revision which I highlighted and mentioned throughout the text.- What was the role of IT team in this study? please more describe it in any relevant part of the article.- This manuscript suffers from the lack of "Literature review". Literature review regarding similar previous studies and their results should be added to the "Introduction" as well as the "Discussion" parts.
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	The reviewer also provided a marked copy with additional comments. Please contact the publisher for full details.
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REVIEWER	Corinna Falck-Ytter MD Louis Stokes VA Medical Center Case Western Reserve University Cleveland, OH USA
REVIEW RETURNED	10-Oct-2016

GENERAL COMMENTS	<p>Short Summary:</p> <p>A pharmacist led intervention in a GP catchment area to identify patients who do not have the 9 NHS recommended diabetes care processes and change in key outcome measures. The GP's were provided with data on their patients and it was left up to them what action to take. The study led to an overall increase in diabetes care processes and improved outcomes over the course of the intervention.</p> <ul style="list-style-type: none"> • The topic is timely and important for the general practitioner worldwide. • Care teams that have pharmacists may decide to involve them into panel management • The article does add to the existing knowledge of the potential roles of a pharmacist in a care team – however the methodology is unclear • The article would benefit from being more concise and focused and to respect the individual section content more <p>Abstract</p> <ul style="list-style-type: none"> • Well organized in clearly marked sections containing the content, objective, methods, results and conclusion • It is unclear what a “observational analysis” is, see comments on methods below • The intervention section does not make entirely clear that the review was conducted by pharmacists and the intervention carried out by GP • The result section would benefit from being more data focused, e.g. how many patients achieved target readings • Conclusion: Needs to more specific: e.g. “ a pharmacist led review of patient data led to an improvement of.....the improvement abated after the conclusion of the program, which supports the recommendation of... • The abstract may not gain readers attention since it is not very specific (intervention, outcomes data) •
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	<p>Introduction</p> <ul style="list-style-type: none"> • Authors give a short but comprehensive backdrop of DM in the UK • Then they move on to describe the local environment which is helpful • Lines 16-29: DOVE data mentioned includes prescribing practices which is not mentioned again in the publication – would recommend to leave out • A description of the 9 NICE process measures would be helpful • While other literature is cited it is unclear how the intervention described in this publication relates to those studies • Line 35: would leave out “practice to practice variation” as not addressed in the outcomes • This section would benefit from a more detailed description of how pharmacist communicated with practices and how recommendations were executed by either GP or pharmacist • It is unclear what “improving the Read Codes (line 47) “ means • A description on how pharmacists are embedded into the care team would enhance the understanding of the care environment <p>Methods</p> <ul style="list-style-type: none"> • This section lacks a description of the research design, e.g. a cohort study with before and after intervention data collection, it is unclear whether it was a prospective design or not • Would be helpful to know how the original data is collected and by whom, is the reporting by the practices complete etc. – this helps estimate how representative the data is • Would be helpful to know how many GP practices participated • As the program consisted of three phases, the methods section would benefit from initially describing data collection, then how the data was analyzed and what clinical interventions were implemented, and whether the implementation was standardized amongst the practices • Some of the key activities e.g. “educational sessions for practice personnel in optimizing T2D management” or under the second phase “ensure prescribing was aligned...” are (unless I missed something) not mentioned again in the manuscript • It is unclear what the timeline for data collection was, e.g. what was accepted as a baseline A1c or BP (months before intervention) and as an outcomes measure (months after intervention) • It is unclear how the data on patients is collected and stored and how it was reviewed, e.g. national data base, local data base • This section would benefit from a description on how the data was communicated to the practices, how often, by whom, what recommendations were given
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	<p>Results</p> <ul style="list-style-type: none"> • Line 4: total number of patients in catchment area and how many of those have Diabetes is missing • Figure one: recommend focusing the outcome as described in text: "number of patients receiving all of the NICE recommended 9 key care processes" • Line 26: would recommend to describe how many patients had readings less than one year old and report outcomes data only on those • Would recommend to restate the definitions of good control • Table two: unclear what the time frame is for pre and post A1c, e.g. longest could be 3 years? (One year prior to commencement, and one year post conclusion?) • Table three needs absolute numbers and percentages • Line 20: There is interpretation in the method section, that can be moved to the discussion section <p>Discussion</p> <ul style="list-style-type: none"> • Recommend starting the discussion section with a statement on what the study did and the main outcomes e.g.: "This pharmacist led review program of patients with type 2 diabetes in the CCG showed an increase of percentage of patients who have all 9 NICE care processes completed and a decrease in number of patients considered in poor control." • Recommend relating this to other publications where pharmacist led interventions led to changes; how are they comparable how does this project differ • Recommend a discussion of the limitations of the method of the study: potential confounders • Recommend a section on how this program could be introduced to other catchment areas <p>Figures and tables</p> <ul style="list-style-type: none"> • Figure 1: recommend to only show patients who had either 8 or 9 NICE outcomes <p>References</p> <ul style="list-style-type: none"> • There is only one study mentioned on a pharmacist led intervention for medication errors <p>Summary:</p> <ul style="list-style-type: none"> • The topic is timely and the proactive management of patient panels will become more important and should involve all care group members, including pharmacists • The manuscript would benefit from the following revisions: <ul style="list-style-type: none"> ○ Include more detailed description of methods (design) with strength and shortcomings of the chosen design ○ Include a section on where the data was originally collected and how it was queried ○ Place the study in the context of already available
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	<ul style="list-style-type: none"> ○ evidence for pharmacy led interventions ○ Describe only programme content that is reported in the results section ○ Describe in more detail the interventions that were executed by the primary care practices as a result of the information provided by the pharmacist ○ Describe in more detail how the pharmacist is part of the primary care group ○ Remove interpretation of results from the results section ○ May want to focus on the data of patients where the pharmacist did a more detailed review
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VERSION 1 – AUTHOR RESPONSE

Many thanks to yourself and the reviewers for your feedback. I am delighted to read that both reviewers feel that my paper would be a valuable addition to the existing body knowledge and are therefore recommending publication subject to some clarifications. All the comments made are valid and useful, and I have tried to address them as best I can. Whilst I am confident that we have delivered a very interesting project, I have only limited experienced of the writing and submission of my work, so please do let me know if I have misinterpreted any of the feedback or if there are further changes that you require.

Your comments have helped me to improve the paper. In particular I have made efforts to improve section discipline, increase reference to related literature and clarify the methods as suggested.

There are a few questions that the reviewers raised that I can clarify:

1. There was a question about the "role of the IT team". When IT skills are mentioned this refers to skills possessed by the pharmacists involved and not a separate team.
2. It is suggested that the word "practice" could be changed to another term such as "practitioner". When the term "practice" is used it refers to the healthcare provider organisation that the patients are registered with and who are delivering their diabetes care, rather than an individual practitioner. Where appropriate I have amended the term to "General Practice team" or "Practice", and I have added a paragraph at the start of the introduction to explain what a "Practice" is and how it fits into the NHS structure.
3. Table 3 - The data in this table is from a national extraction tool and is presented as percentages because this is how it is presented by NHS England. Other data reported in the study was collected locally as part of the study and so full details, including absolute numbers have been presented.

I hope that my amendments to the paper and the clarifications above move us to a position where the reviewers' recommendations to share this valuable work can be implemented, but I am more than willing to make any further clarifications that you may require.

VERSION 2 – REVIEW

REVIEWER	Shirinsadat Badri Isfahan University of Medical Sciences, Isfahan, Iran
REVIEW RETURNED	12-Jan-2017

GENERAL COMMENTS	Thanks for considering almost all the needed corrections.
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REVIEWER	Corinna Falck-Ytter MD
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	Louis Stokes VA Medical Center Case Western Reserve University Cleveland, OH United States of America
REVIEW RETURNED	16-Jan-2017

GENERAL COMMENTS	Thank you for a much improved and clearer manuscript.
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