

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)	Patient and general practitioner views of tools to delay diagnostic imaging for low back pain: a qualitative study
AUTHORS	Traeger, Adrian; Checketts, Juliet; Tcharkhedian, Elise; O'Connor, Denise; Klinner, Christiane; Sharma, Sweekriti; Vyas, Parima; Albarqouni, Loai; McCaffery, Kirsten

VERSION 1 – REVIEW

REVIEWER	Ilaria Tinazzi Italy
REVIEW RETURNED	23-Jun-2020

GENERAL COMMENTS	<p>This is a qualitative study on tools to delay diagnostic imaging for musculoskeletal pain I think the should focus on low back pain because the term of MSK pain and the possible disease mimicking it are too different The sample size of the participants of the study is very low; how was the sample size calculated? How they selected the proposed tools? Was this study approved-regstred by Ethical local board?</p>
-------------------------	--

REVIEWER	Benjamin Saunders Keele University, UK
REVIEW RETURNED	03-Jul-2020

GENERAL COMMENTS	<p>This is a generally well-written paper on an important topic. It has the potential to make a contribution to the existing literature on issues related to imaging for MSK pain. However, there are some significant issues that I would suggest need attention, which I have outlined in full below.</p> <p>Title and abstract</p> <ul style="list-style-type: none">• The reference to MSK pain in the title and abstract doesn't reflect the rest of the paper, given that all of the patients interviewed had LBP. Experience of LBP may differ from that of other MSK conditions, and therefore I don't think this can be generalised to all MSK pain sites. I'd suggest amending to reflect this. <p>Introduction</p> <ul style="list-style-type: none">• More information is needed about the tools being explored; for instance, how were they developed, are they currently in use in practice or are they due to be tested (for instance in a trial context); are they widely available or just in use in the Australian context? At the top of P8 it is suggested these tools are just at the stage of being piloted, but this isn't fully clear. This is important background context for understanding the value of the paper.
-------------------------	---

Methods

- The way the COREQ checklist has been used is unusual. This is commonly used to point the reader to the places in the manuscript where the various methodological issues are discussed, to allow the reader to assess the rigour of the methods used, not as a way to add lots of additional detail about the methods that isn't included in the manuscript, as has been done here. I imagine this has been done due to word limit constraints, which I empathise with, but the reader should be given sufficient information about the methods used in the manuscript itself, and not have to refer to a separate additional file. Most if not all of the information included in this checklist should therefore be included in the manuscript itself, as at present the methods section is brief and lacking in detail.
- At the top of P7, the authors state that focus group participants filled out a baseline questionnaire. More details of this are needed – what was its purpose and content? Were there follow-up questionnaires (which is suggested by this being baseline)?
- It's not fully clear why focus groups and interviews were both carried out, and how these related to one another? For instance, were the findings from FGs further explored in interviews? More detail is needed here about the analytic process.
- The data analysis section is very brief; there is not enough detail about the processes of coding and developing themes, whether there were any attempts to discuss differing views or establish inter-coder reliability etc. Again some of this detail is included in the COREQ checklist, but really needs to be in the manuscript itself.
- The section on PPI involvement at the top of P8 is also very brief and requires more detail.

Results

- On P8, more needs to be included about the key characteristics of participants. Whilst the authors signpost the reader to table 1, tables should only really include supplementary information, not key characteristics of the sample. Also, it's unclear why the authors have stated that the 'majority' of GP were female, and 'most' were born outside of Australia, rather than providing the exact numbers, which would be more informative.
- I'd suggest that in terms of the structure of the results it would make more sense to present clinicians' views and patients' views in relation to each of the three tools in turn, rather than present all of the GP views and then patient views separately. If the authors decided to stick with this structure, then an explanation of why the results have been separated out in this way would be useful.
- The findings are generally interesting; however, some of the quotes presented are very brief, sometimes just one line, and therefore it's hard to get a sense of the richness of the data or the context in which the comments were made.
- Linked to this point, the data from the focus groups is presented as if it came from individual interviews; there is no sense of the interaction or discussion within focus groups, and therefore it's unclear what the value was of conducting focus group instead of just individual interviews.
- It also appears strange that some quotes directly relating to points made in the results are included in an appendix. Again I can only think that this was done to keep the word limit down, but this isn't really a satisfactory reason not to include these quotes in the main body of the manuscript. Having to move between the paper and appendix is inconvenient for the reader and makes it more challenging to follow the arguments being put forward.

	<ul style="list-style-type: none"> • On P11 there were a few quotes that were unclear to me. I'm unclear as to why community is referred to as a lower level than primary care. This might be to do with the context of the Australian system. This could do with some clarification for an international audience. • On line 40 the authors state that "GPs felt the Dialogue Sheet and Wait-and-see Note would be patronising to patients"; however, this doesn't reflect what the GP says in the accompanying quote. I'd suggest extending the quote to provide further context to the GP's views, or adding more explanation about the interpretation the authors have provided. • Finally, it's unclear from the findings whether there were differences across primary care and emergency settings. One would assume that decisions around imaging and use of tools would be different across these settings, but this doesn't come across anywhere in the findings. <p>Discussion</p> <ul style="list-style-type: none"> • Suggest the strengths and limitations comes after the comparison with other literature section. • The comparison with other literature section is very brief. Only 3 studies are referred to, and none in the area of MSK. There is a rich literature on the management of MSK conditions in primary care settings, use of imaging and views towards decision-aid tools. A broader discussion of this literature would be useful to better situate this paper within the field. • It may be useful to combine the implications sections with the conclusion. At present the conclusion is very brief and doesn't add much to the paper.
--	---

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

- 3. I think the should focus on low back pain because the term of MSK pain and the possible disease mimicking it are too different**

We agree that target of the tools is primarily on low back pain. We have replaced "musculoskeletal pain" with "low back pain" where appropriate throughout. We have also focused the background and discussion more on low back pain.

- 4. The sample size of the participants of the study is very low; how was the sample size calculated?**

We have added the following to clarify our sampling methods (Page 5):

"We aimed to conduct a minimum of two focus groups of at least 5 participants for each participant type. We planned additional "mop-up" individual interviews which took place until saturation was reached."

5. How they selected the proposed tools?

We have added the following (Page 9):

“We selected these three tools because they were being used in a broader program of work to reduce unnecessary diagnostic imaging by the Commonwealth Department of Health.”

6. Was this study approved-registered by Ethical local board?

Yes. Please see Page 22 for details:

“**Ethics:** Study procedures were approved by the University of Sydney HREC (ref: 2019/591), the Southwest Sydney Local Health District HREC (ref: 2019/ETH00281), and the Bond University HREC (ref: LA03323).”

Reviewer: 2

7. Title and abstract. The reference to MSK pain in the title and abstract doesn't reflect the rest of the paper, given that all of the patients interviewed had LBP. Experience of LBP may differ from that of other MSK conditions, and therefore I don't think this can be generalised to all MSK pain sites. I'd suggest amending to reflect this.

We agree. Please see our edits to the title and abstract in response to comment #3.

8. Introduction. More information is needed about the tools being explored; for instance, how were they developed, are they currently in use in practice or are they due to be tested (for instance in a trial context); are they widely available or just in use in the Australian context? At the top of P8 it is suggested these tools are just at the stage of being piloted, but this isn't fully clear. This is important background context for understanding the value of the paper.

We have added the following to the Introduction:

“In 2019 the Australian Government Department of Health developed a resource pack to support GPs to reduce unnecessary imaging for musculoskeletal pain, with a key focus on low back pain. The pack included three newly developed communication tools. One was developed by the lead author in collaboration with an advertising agency (Overdiagnosis Leaflet). The remaining two tools (a Dialogue Sheet, and a 'Wait-and-see' Note) were developed by the Behavioural Economics and Research Team at the Department of Health and with input from researchers and clinicians within the Wiser Healthcare Research Collaboration. The goal of the tools was to encourage discussions between patient and clinician about the need for imaging and support a delayed prescribing approach to reduce unnecessary requests.”

9. The way the COREQ checklist has been used is unusual. This is commonly used to point the reader to the places in the manuscript where the various methodological issues are discussed, to allow the reader to assess the rigour of the methods used, not as a way to add lots of additional detail about the methods that isn't included in the manuscript, as has been done here. I imagine this has been done due to word limit constraints, which I

empathise with, but the reader should be given sufficient information about the methods used in the manuscript itself, and not have to refer to a separate additional file. Most if not all of the information included in this checklist should therefore be included in the manuscript itself, as at present the methods section is brief and lacking in detail.

We have moved most of the information from the checklist to the methods section.

10. At the top of P7, the authors state that focus group participants filled out a baseline questionnaire. More details of this are needed – what was its purpose and content? Were there follow-up questionnaires (which is suggested by this being baseline)?

We have clarified that this was a demographic questionnaire, and provided some additional details (Page 7):

“Prior to beginning the sessions participants completed a written demographic questionnaire so that we could describe the sample. We asked all participants whether they agreed with the following statement: “Everyone who gets low back pain should have an imaging test (x-Ray, CT, MRI).” Patients were asked an additional question about their history of imaging for low back pain. GPs were asked additional questions regarding years practicing, their self-reported imaging rate, and their interest in musculoskeletal conditions.”

11. It’s not fully clear why focus groups and interviews were both carried out, and how these related to one another? For instance, were the findings from FGs further explored in interviews? More detail is needed here about the analytic process.

We have clarified as follows (Page 8):

“We used these additional “mop-up” interviews to further explore salient themes that emerged in the focus groups.

We started by analysing the focus groups first. Two authors coded the data from the focus groups (AT, CK) using Microsoft Word and a third (SS) reviewed the transcripts and coding. Themes were derived from the data. The research team met to discuss themes emerging from the focus groups, and interpretation of the data. Key themes that the team agreed on were used to develop an initial coding framework for the data. These discussions about findings from the focus groups also led to refinement of the discussion guide for the individual interviews.”

12. The data analysis section is very brief; there is not enough detail about the processes of coding and developing themes, whether there were any attempts to discuss differing views or establish inter-coder reliability etc. Again some of this detail is included in the COREQ checklist, but really needs to be in the manuscript itself.

Please see our response to comment #6 and #8.

13. The section on PPI involvement at the top of P8 is also very brief and requires more detail.

We have added the following (Page 10):

“We informally piloted the tools with consumers (n= 4) and clinicians (n=4) to optimise content prior to enrolling participants. We asked them to provide feedback on the readability, content, and usefulness of the tools and made minor edits to produce the versions evaluated in this study.”

Results

- 14. On P8, more needs to be included about the key characteristics of participants. Whilst the authors signpost the reader to table 1, tables should only really include supplementary information, not key characteristics of the sample. Also, it's unclear why the authors have stated that the 'majority' of GP were female, and 'most' were born outside of Australia, rather than providing the exact numbers, which would be more informative.**

We have added the following (Page 10):

“Twelve GP participants were female and 13 had more than 20 years in practice. None of the GP participants agreed with the statement: “Everyone who gets low back pain should have an imaging test (x-Ray, CT, MRI).” 13 GP participants reported requesting imaging in fewer than one quarter of their consultations for musculoskeletal imaging, and 8 had an interest in musculoskeletal conditions.”

Eleven patient participants were born outside of Australia, 12 were between 20 and 60 years of age, and 6 had a university education or higher. All patient participants had had an imaging test in the past and 11 believed everyone with low back pain should have imaging.”

- 15. I'd suggest that in terms of the structure of the results it would make more sense to present clinicians' views and patients' views in relation to each of the three tools in turn, rather than present all of the GP views and then patient views separately. If the authors decided to stick with this structure, then an explanation of why the results have been separated out in this way would be useful.**

We tried this approach in early versions of the manuscript and decided as a team that way we have presented the results was the clearest. We have added our justification (Page 11):

“During the analysis the author team agreed that the clearest format to present the results was to present views of the two groups of participants separately.”

- 16. The findings are generally interesting; however, some of the quotes presented are very brief, sometimes just one line, and therefore it's hard to get a sense of the richness of the data or the context in which the comments were made.**

We agree that having more quotes in text adds more context when reading the findings. We have added some longer quotes to the text from the Appendix. Due to word limit we have kept 10 of the 19 additional quotes in the Appendix should readers be interested.

- 17. Linked to this point, the data from the focus groups is presented as if it came from individual interviews; there is no sense of the interaction or discussion within focus groups, and therefore it's unclear what the value was of conducting focus group instead of just individual interviews.**

Because our research focused primarily on how individuals reacted to the tools, we chose to focus on the views of individuals that emerged from both of the data collection methods we used. We clarify that our choice to perform focus groups was a practical one (Page 8):

“Because this project worked to a strict deadline imposed by our Department of Health collaborators, we chose to conduct focus groups primarily to capture the views of several participants in a short time frame.”

18. It also appears strange that some quotes directly relating to points made in the results are included in an appendix. Again I can only think that this was done to keep the word limit down, but this isn't really a satisfactory reason not to include these quotes in the main body of the manuscript. Having to move between the paper and appendix is inconvenient for the reader and makes it more challenging to follow the arguments being put forward.

Please see our response to #12.

19. On P11 there were a few quotes that were unclear to me. I'm unclear as to why community is referred to as a lower level than primary care. This might be to do with the context of the Australian system. This could do with some clarification for an international audience.

We have clarified as follows (Page 14):

“Some GP participants felt the communication tools were more useful for less experienced doctors or in the community more broadly (Q4):

“This [*overdiagnosis leaflet*] is a document that absolutely needs to go [beyond] primary care level, at a community level.” (GP focus group)”

20. On line 40 the authors state that “GPs felt the Dialogue Sheet and Wait-and-see Note would be patronising to patients”; however, this doesn't reflect what the GP says in the accompanying quote. I'd suggest extending the quote to provide further context to the GP's views, or adding more explanation about the interpretation the authors have provided.

We have added more detail as follows (Page 14):

“GPs felt the Dialogue Sheet and Wait-and-see Note would be patronising to patients or could compromise the clinician-patient relationship:

“These pieces of paper are the opposite [*to patient centered care*], these are all giving me, the doctor, the power. And the patient is the person who's below me doing what I have told them.”
(GP focus group)

“[If I were to use it with my patients] They'd probably think I've gone mad.” (Female GP, 20+ years of experience)”

21. Finally, it's unclear from the findings whether there were differences across primary care and emergency settings. One would assume that decisions around imaging and use of

tools would be different across these settings, but this doesn't come across anywhere in the findings.

Because we did not include practitioners and patients from both settings in this study, we believe it is beyond the scope of this paper to comment on differences in the settings. We acknowledge this in our Limitations section (page 19).

Discussion

22. Suggest the strengths and limitations comes after the comparison with other literature section.

We would prefer to keep to the standard BMJ format of describing strengths and limitations before comparison with other studies.

23. The comparison with other literature section is very brief. Only 3 studies are referred to, and none in the area of MSK. There is a rich literature on the management of MSK conditions in primary care settings, use of imaging and views towards decision-aid tools. A broader discussion of this literature would be useful to better situate this paper within the field.

We have added some information specific to communication tools for imaging of low back pain (Page 20):

"We are aware of one other study that evaluated reactions to a communication tool to support GPs to reduce unnecessary imaging of low back pain. Jenkins et al examined GP and consumer reactions to a booklet about lumbar imaging.(18) Similar to our findings, some GPs preferred digital, printable format whereas consumers appreciated a glossy hard copy to take home to discuss with their family. Consumers valued detailed, written, individualised information and reassurance. Our findings suggest that patients may also desire tools that provide them with the sense that the GP has taken them seriously. The co-signed section in the Dialogue Sheet and Wait-and-See appeared to achieve this, yet GPs had reservations about using it.

Trials of patient-mediated interventions to reduce imaging rates have had limited success and suggest challenges to uptake.(19) For example Schectman et al found no effect of patient education tools on imaging rates in their trial including 120 GPs, but only one third of GPs reported using the tools in the trial.(20) Given the divergent and sometimes strong views expressed in this study, ongoing involvement and evaluation of communication tools to meet the needs of end-users appears essential."

24. It may be useful to combine the implications sections with the conclusion. At present the conclusion is very brief and doesn't add much to the paper.

Done.

VERSION 2 – REVIEW

REVIEWER	Benjamin Saunders Keele University, UK
REVIEW RETURNED	18-Aug-2020

GENERAL COMMENTS

This paper has been improved from the previous version. In particular, the additional information in the introduction, methods and results has led to greater clarity. However, there are still some essential points that need addressing from the original reviews, and the additions made have also given rise to some further issues that require attention, as detailed below:

- Whilst the additions to the introduction have provided more context around the development and purpose of the three tools, it's still unclear in the intro whether these tools are already in use in some areas, or whether there are future plans to roll these tools out into practice, or test their effectiveness in a trial setting. More information about the plans for either testing or implementing these tools would therefore be useful here.
- On P6 additional detail has been added about the recruitment of GP participants, however, there is a lack of clarity in some of these details. The authors state that 7 GP participants were recruited from a separate study on diagnostic imaging, but later in the paragraph there is reference to 4 GPs from the separate study taking part in individual interviews. Did the other 3 GPs therefore take part in focus groups? This is a little unclear. Additionally, it is mentioned that the GPs recruited from this separate study were invited to use the tools in practice for 3 weeks. Were the other GPs recruited from the professional development event also given this opportunity? This is important, as if only some GPs used the tools then views towards them will be different, i.e. hypothetical vs experiential.
- The role of the initial question asked in interviews "Everyone who gets low back pain should have an imaging test (x-Ray, CT, MRI)" could be further discussed. Was this a simple yes/no or did the interviewer explore this answer in more detail and probe interviewees' reasoning?
- In response to the previous reviews, the authors have added more detail about the role of PPIE. However, the PPIE involvement referred to is not for this study, but the development of the tools, which preceded this study. The section on PPIE involvement in the methods should refer to PPIE involvement in the development or processes for the study being reported here, i.e. the qualitative focus group/ interview study.
- The paragraph added to the top of P8 should come under data analysis, not data collection.
- On p9, the authors state that recruitment of GPs was driven by resources and not necessarily by saturation. With this in mind, were there any themes or individual findings that the authors feel were not sufficiently saturated in the GP data, and which could therefore be further explored in future research?
- On p9, the authors state: We selected these three tools because they were being used in a broader program of work to reduce unnecessary diagnostic imaging by the Commonwealth Department of Health. This is part of the rationale for the study, and should therefore be moved to the introduction section.
- At the bottom of P9 the authors state: We based our framework analysis on a phenomenological orientation. That is, we focused on individual experiences and reactions arising from the data. Firstly, this is a little confusing because 'framework analysis' is in itself an analytic approach, so I'd suggest not using this phrase unless it is referring to the use of the framework analysis approach. Secondly, the focus on individuals' experiences does not in itself constitute a phenomenological approach, and this reference to phenomenology does not appear to fit with the overall description of the methods or

	<p>presentation of the results. Whilst phenomenology commonly orients to a within-case focus, the analysis presented here appears to take a thematic approach which is focused on across-case comparisons, drawing on the constant comparison method, as detailed on P10. The reference to phenomenology therefore does not seem to have coherence with this approach, and I'd suggest this needs further clarification.</p> <ul style="list-style-type: none"> • On P20, the authors have added comparison of the findings with other literature; however, in referencing this other literature they refer to GPs and 'consumers' rather than patients. Clarification as to who the participants were in the studies referenced, and why they are termed 'consumers', would be useful. • In their response to previous reviews, the authors say that they do not feel able to comment on differences in views across primary care and emergency settings, because they did not include practitioners and patients from both settings in the study. However, in the strengths and limitations box at the beginning of the paper it is stated that "We sampled people involved in the decision to have diagnostic imaging for low back pain in emergency and primary care". Suggest this needs clarifying.
--	---

VERSION 2 – AUTHOR RESPONSE

1. **Whilst the additions to the introduction have provided more context around the development and purpose of the three tools, it's still unclear in the intro whether these tools are already in use in some areas, or whether there are future plans to roll these tools out into practice, or test their effectiveness in a trial setting. More information about the plans for either testing or implementing these tools would therefore be useful here.**

We have added the following on Page 5:

"Before deciding whether they would distribute the tools to GPs the Department of Health commissioned a qualitative evaluation, which we describe here."

2. **On P6 additional detail has been added about the recruitment of GP participants, however, there is a lack of clarity in some of these details. The authors state that 7 GP participants were recruited from a separate study on diagnostic imaging, but later in the paragraph there is reference to 4 GPs from the separate study taking part in individual interviews. Did the other 3 GPs therefore take part in focus groups? This is a little unclear.**

Apologies, that was a typo. It should have read 4 GPs from a separate study (Page 6).

"We recruited an additional 4 GP participants to participate in individual interviews, from a separate study."

3. **Additionally, it is mentioned that the GPs recruited from this separate study were invited to use the tools in practice for 3 weeks. Were the other GPs recruited from the professional development event also given this opportunity? This is important, as if only some GPs used the tools then views towards them will be different, i.e. hypothetical vs experiential.**

We have clarified that only 4 of 16 GPs took the tools away (Page 6).

“...take the three tools away with them to use in their practice, for a period of 3 weeks (GPs in the focus groups were not given this opportunity).”

We agree that there is an important difference between hypothetical and experiential use of a tool. Unfortunately, we could not tease this out in the data because none of the GPs who took the tools away managed to use them in the 3-week period. We have added this as a limitation to our study (Page 19).

“Unfortunately, none of the 4 GPs who offered to take the tools away could reflect on use of the tools in practice, either because they did not see an appropriate patient in the 3-week period, or because they forgot. This means that the views expressed here are restricted to hypothetical, rather than experiential, use of these tools.”

- 4. The role of the initial question asked in interviews “Everyone who gets low back pain should have an imaging test (x-Ray, CT, MRI)” could be further discussed. Was this a simple yes/no or did the interviewer explore this answer in more detail and probe interviewees’ reasoning?**

This was a yes/no followed by probing and exploration of reasoning. Those data were analysed for a separate qualitative study where the primary focus was patient and practitioner views of imaging (under review elsewhere).

- 5. In response to the previous reviews, the authors have added more detail about the role of PPIE. However, the PPIE involvement referred to is not for this study, but the development of the tools, which preceded this study. The section on PPIE involvement in the methods should refer to PPIE involvement in the development or processes for the study being reported here, i.e. the qualitative focus group/ interview study.**

This was an oversight – thanks for pointing it out. We have edited as follows (Page 10):

“Patients and the public were not involved in the design or conduct of this study.”

- 6. The paragraph added to the top of P8 should come under data analysis, not data collection.**

Moved paragraph beginning with “Because this project worked...” to Page 9 under Data Analysis.

- 7. On p9, the authors state that recruitment of GPs was driven by resources and not necessarily by saturation. With this in mind, were there any themes or individual findings that the authors feel were not sufficiently saturated in the GP data, and which could therefore be further explored in future research?**

We have added the following (Page 22):

“We may not have reached saturation on the key ways a GP might integrate communication tools into their workflow. Future research on how best to integrate delayed prescribing tools into workflow (e.g. via access to leaflets, printed tear-off sheets, web- or app-based tool, electronic medical record-based tools) would be informative for initiatives to reduce overuse.”

8. On p9, the authors state: **We selected these three tools because they were being used in a broader program of work to reduce unnecessary diagnostic imaging by the Commonwealth Department of Health. This is part of the rationale for the study, and should therefore be moved to the introduction section.**

Removed and included in Introduction as suggested (Page 5):

“In 2019 the Australian Commonwealth Government Department of Health developed a resource pack to support GPs as part of a broader program of work to reduce unnecessary diagnostic imaging for musculoskeletal pain. The pack included three newly developed communication tools.”

9. **At the bottom of P9 the authors state: We based our framework analysis on a phenomenological orientation. That is, we focused on individual experiences and reactions arising from the data. Firstly, this is a little confusing because ‘framework analysis’ is in itself an analytic approach, so I’d suggest not using this phrase unless it is referring to the use of the framework analysis approach. Secondly, the focus on individuals’ experiences does not in itself constitute a phenomenological approach, and this reference to phenomenology does not appear to fit with the overall description of the methods or presentation of the results. Whilst phenomenology commonly orients to a within-case focus, the analysis presented here appears to take a thematic approach which is focused on across-case comparisons, drawing on the constant comparison method, as detailed on P10. The reference to phenomenology therefore does not seem to have coherence with this approach, and I’d suggest this needs further clarification.**

We have edited as follows (Page 9):

“Our thematic approach focused on individual experiences and reactions arising from the data and across case comparisons.”

10. **On P20, the authors have added comparison of the findings with other literature; however, in referencing this other literature they refer to GPs and ‘consumers’ rather than patients. Clarification as to who the participants were in the studies referenced, and why they are termed ‘consumers’, would be useful.**

Clarified as follows (Page 20):

“Jenkins et al. examined GP and health consumer (community members with a history of low back pain) reactions

11. **In their response to previous reviews, the authors say that they do not feel able to comment on differences in views across primary care and emergency settings, because they did not include practitioners and patients from both settings in the study. However, in the strengths and limitations box at the beginning of the paper it is stated that “We sampled people involved in the decision to have diagnostic imaging for low back pain in emergency and primary care”. Suggest this needs clarifying.**

Apologies for the lack of clarity. What we meant to say that we did not have data on both sets of participants, from both settings (ie doctors in ED vs primary care; patients in ED vs primary care). To avoid confusion, we replaced the point in the box (Page 3) with the following:

“Understanding how both GPs and patients might use communication tools will help inform strategies to reduce overuse of diagnostic imaging.”

VERSION 3 – REVIEW

REVIEWER	Benjamin Saunders Keele University, UK
REVIEW RETURNED	04-Sep-2020
GENERAL COMMENTS	The authors have satisfactorily addressed all of the issues raised in the review, and I am happy to recommend this paper for publication.