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)	"We don't seem to engage with dentists": A qualitative study of primary healthcare staff and patients in the North East of England on the role of pharmacists in oral health care.
AUTHORS	Sturrock, Andrew; Preshaw, Philip M; Hayes, Catherine; Wilkes, Scott

VERSION 1 – REVIEW

REVIEWER	Dr Meng-Wong Taing The University of Queensland, Brisbane, Australia
REVIEW RETURNED	19-Jun-2019

GENERAL COMMENTS	An interesting paper highlighting potential avenues for pharmacists to expand their clinical service role within oral healthcare in general practices. Some concerns and suggestions for consideration by the authors: - A Grounded Theory approach was adopted in this research as stated by the Authors. Currently, the results are presented descriptively as themes. The authors did not produce a substantive theory (a fundamental component of a grounded theory study) relating the concepts/themes together (to produce not just a description but a model, in which more abstract concepts are related and a social process explained). I would suggest the authors clearly define which components of the Grounded Theory approach they utilised within their study. - I would also be interested in viewing the Focus group interview guide for patients. Can this please be included? - My main concern lies in justifying whether concepts/themes were fully developed within different health professionals/staff (GP's, nurses, pharmacists, practice managers) and patients? The Authors interviewed only 2 GP's, 3 administrative staff, 4 nurses, 10 pharmacists and only 1 focus group of patients. Why did participant recruitment cease at these numbers? Assessing the Healthcare Professional and Patient participant characteristics, there are variables not accounted for (e.g. locality – regional/rural vs metropolitan, SES: high vs low socioeconomic, age and experience differences etc.) that would be required to develop the themes to provide a more reliable assessment whether certain roles and characteristics are associated with particular responses. - Related to my third point (of theoretical saturation), I am curious to know: o Did GP's or nurses also express interest in further expansion and provision of oral health advice/services. o Was there discussion pertaining to oral healthcare role clarification within general practices (between GPs nurses and pharmacists)?

	o Are GP's comfortable with e.g. pharmacist prescribing drugs for acute oral health presentations (as currently managed by GP's)? - If this is possible. o Were any patient's opposed to dental services by pharmacists? Specific roles pharmacists should/should not perform? o Is there support from dental professional bodies for pharmacist-led expanded roles within oral healthcare? Are pharmacists motivated to provide extra services if currently no financial incentives are available?

REVIEWER	Shereen Nabhani-Gebara,PharmD,BCOP,SFHEA Kingston University London UK
REVIEW RETURNED	20-Aug-2019

GENERAL COMMENTS	This manuscript is well written and addresses an interesting and important topic.However, it needs to address the following: -Abstract: the objective in the abstract does not match the objective in the main text -Methodology: I believe not having interviews with dental staff is a major limitation to the study -Results: Table 1: how many different surgeries do these healthcare professionals represent? The theme about the the enhanced role of the pharmacist is more descriptive than analytical. -Discussion: The discussion does not seem to stem from the results. Even though it was one of the main objectives, the theme about oral health was underdeveloped and under discussed. The lack of interviews with dental staff in this piece of work reinforces the segregation that the authors are describing and critiquing. The voice and opinion of the dental staff are needed to support the validity of the study and the recommendations. The authors recommend dentists have access to SCR however this did not stem from the results. How would that address the problem that was raised by the participants. COREQ list: item 13 (non-participation) was not on page 22 as indicated in the checklist item 32: it was not clear which were the minor themes

REVIEWER	Angela Durey University of Western Australia Australia
REVIEW RETURNED	21-Aug-2019

GENERAL COMMENTS	Thank you for inviting me to review this paper which highlights the collaborative relationship between GPs, practice nurses and pharmacists in caring for patients. While this is reflected in the growing inter-professional role pharmacists play in primary health care including around the prevention and management of long-term conditions, medication reviews and implementing medication safety, offering advice and guidance is less common in oral health, the focus of the paper. Poor oral health is a widespread and significant problem and while non-oral health professionals such as GPs and pharmacists offer patients advice on preventing and managing oral disease, evidence suggests minimal interaction with dentists including whether such advice or management is

	communicated back to dentists. As the authors conclude, the lack of integration between oral and general health care services can detrimentally affect patient care and safety. For the non-UK reader, some context about health services and costs to patients for oral and general health care would be helpful. In the methodology section, health professionals included pharmacists, GPs, a practice nurses and a practice manager – but no dentists. While this is acknowledged in the Limitations section, an explanation would be helpful of why dentists were not included given the topic is oral health and the focus is inter-professional practice in primary health care. Findings suggest that pharmacists and GPs face challenges around giving advice to patients on prevention and management of oral health conditions such as dental pain or infection. These include limited oral health knowledge with inadequate information offered in their respective trainings, and continuing professional development; dentists not having access to medical records and insufficient flow of information between medical and dental services on managing patients' oral health. Given the prevalence of chronic disease and the negative impact on oral health of some medications, are there protocols or procedures around GPs or pharmacists contacting the patient's dentist if medication has been prescribed or changed? Limited contact and a lack of collaboration between primary health care providers such as GPs and pharmacists with dentists not only negatively affects health outcomes and patient safety, as alluded to in the paper, but also highlights this as a significant systemic issue. The authors' findings offer strong evidence of the shortfalls in the health system when dentists are not included in inter-professional primary health care approaches to address poor oral health. A more critical discussion that responds to the 'so what' question posed by the findings could help inform the translation process. For example, what specific systemic issues need to be addressed so optimum oral health care is provided eg around education and training of health professionals or ensuring MHRA safety alerts are actioned? How can the perceived historic segregation between doctors and dentists be addressed so it is not a barrier to optimum patient care and safety related to oral health? Who is responsible for establishing formal referral pathways between medical and dental services? Pharmacists clearly play an integral role in the interaction and management between oral health and high risk medications to ensure good health outcomes and patient safety. Do pharmacists inform dentists of their rapidly evolving role and current scope of practice in relation to oral health? Findings suggest pharmacists would like to play a greater role in offering oral health advice to patients but need guidance from service commissioners for complex interventions and inter-professional collaboration with dentists. Who are service commissioners and what is their role? Do dentists need to be involved in this process as part of patient care and safety and if so, how can this be achieved? How can GPs and pharmacists improve collaboration with dental professionals so correct information flows between medical and dental services?

REVIEWER	Fabian Huettig, DMD, Ph.D. Department of Prosthodontics

	Tuebingen University Hospital Eberhard Karls Universitat Tubingen, Germany
REVIEW RETURNED	21-Aug-2019

GENERAL COMMENTS	Since the manuscript has merits and the authors performed as sufficient study, I'd like to post my suggestions to improve the paper for potential publication. For my point of view the manuscript needs a major revision. First and beforehand the authors should clearly state the realistic scope of activities, which should (better could) be covered by pharmacists in terms of oral health support for patients/ dentists. This goes in hand with a discussion of overlapping competences to dentists, dental hygienists, dental therapists. For now, the reader does not know what pharmacists concretely could do (in the setting of the health system and their daily obligations as well as their education). This hinders the understanding of the results section. Regarding the results section, the authors should give a coding tree or at least an overview of themes/topics which were underlying the selection of the presented essence of report. As there is only little research about intersectional care between dentists and other specialities (such as pharmacists), the authors should at least refer to the current literature to discuss their results and objectives also on basis of professional perceptions. My hypothesis is that interviewed pharmacists have addressed this aspect. Therefore I also suggest that the authors refer and cross check following papers: • Investigating physicians' and patients' oral health knowledge: a field needed interdisciplinary policy making approach: July 2019 International Journal of Health Promotion and Education; DOI: 10.1080/14635240.2019.1638813 • GPs' and dentists' experiences and expectations of interprofessional collaboration: Findings from a qualitative study in Germany: March 2017BMC Health Services Research 17(1):179 • Development of an HL7 FHIR Architecture for Implementation of a Knowledge-based Interdisciplinary EHR: July 2019 DOI: 10.3233/SHTI190067

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

An interesting paper highlighting potential avenues for pharmacists to expand their clinical service role within oral healthcare in general practices. Some concerns and suggestions for consideration by the authors:

- A Grounded Theory approach was adopted in this research as stated by the Authors. Currently, the results are presented descriptively as themes. The authors did not produce a substantive theory (a fundamental component of a grounded theory study) relating the concepts/themes together (to produce not just a description but a model, in which more abstract concepts are related and a social process explained). I would suggest the authors clearly define which components of the Grounded Theory approach they utilised within their study.

  We acknowledge that whilst clear delineation between empirical and interpretivist research occurs at the paradigm level, that each methodology has explicit criteria for the collection, analysis and interpretation of data. As such the Grounded Theory approach adopted within the study is a structured, but flexible methodology. Its appropriateness here rests on how little was currently known about the phenomenon under investigation; via thematic analysis we have been able to construct a narrative explanatory theory that uncovers a process inherent to our substantive area of inquiry.

- I would also be interested in viewing the Focus group interview guide for patients. Can this please be included?

  A copy of the focus group interview guide has been uploaded as a supplementary file

- My main concern lies in justifying whether concepts/themes were fully developed within different health professionals/staff (GP's, nurses, pharmacists, practice managers) and patients? The Authors interviewed only 2 GP's, 3 administrative staff, 4 nurses, 10 pharmacists and only 1 focus group of patients. Why did participant recruitment cease at these numbers? Assessing the Healthcare Professional and Patient participant characteristics, there are variables not accounted for (e.g. locality – regional/rural vs metropolitan, SES: high vs low socioeconomic, age and experience differences etc.) that would be required to develop the themes to provide a more reliable assessment whether certain roles and characteristics are associated with particular responses.

  In keeping with the process of Constant Comparative Analysis, data collection was stopped upon theoretical saturation of the findings. Since we seek to illuminate the perspectives of participants rather than generalise from them, this does not negate the potential transferability of findings to similar contexts and settings and nullifies the need to account for specific variables.

Related to my third point (of theoretical saturation), I am curious to know:

- Did GP's or nurses also express interest in further expansion and provision of oral health advice/services.

  GPs and nurses did feel like there was a role for pharmacists in the provision of oral health advice/services, but an interest in further expanding their own professional roles was not apparent from the data and was not explored in detail.

- Was there discussion pertaining to oral healthcare role clarification within general practices (between GPs nurses and pharmacists)?

  There was not a definitive or defined operational role in relation to the provision of oral healthcare or oral health services by pharmacists or other primary care staff that was consistent between the participants. It is clear that some participants take a greater role than other, but this is still not defined. One of the findings presented in the results highlights the need for more direction to be provided by service commissioners and/or professional bodies.

- Are GP's comfortable with e.g. pharmacist prescribing drugs for acute oral health presentations (as currently managed by GP's)? - If this is possible.

  All of the healthcare professionals were comfortable in managing common oral health conditions, such as a mouth ulcer, and in providing basic oral health advice. However, all reported limited knowledge and the current need to signpost patients to dental services where possible. GPs were happy for pharmacists to take on an increased role in relation to prescribing, however they reported that this skill set was particularly suited to the management of long term conditions; there was no detailed discussion with GPs in relation to prescribing specifically in acute oral health presentations.

- Were any patient's opposed to dental services by pharmacists? Specific roles pharmacists should/should not perform?

  Patients were supportive of pharmacists having expanded roles. The only negative was in the discussion relating to the fact that pharmacists in the community are easily accessible and there were concerns that in general practice they would become another professional group with whom it was challenging to make an appointment.

- Is there support from dental professional bodies for pharmacist-led expanded roles within oral healthcare? Are pharmacists motivated to provide extra services if currently no financial incentives are available?

  There is some consensus in the UK that pharmacists can work collaboratively with dental professionals to improve oral health. A recent opinion piece published in the BDJ by the President and former President of the Royal Pharmaceutical Society and British Dental Association is referenced in the introduction. The participants interviewed were willing to expand further roles, but did feel that commissioned services and more direction would be required. We have edited the discussion to highlight that professional bodies should further consider an expanded role for pharmacists in the provision of oral healthcare.

Reviewer: 2

- Abstract: the objective in the abstract does not match the objective in the main text

  Main text amended to clarify

- Methodology: I believe not having interviews with dental staff is a major limitation to the study

  Whilst relevant, it was not in the scope of this particular research question to include interviews with dental staff.

Results:

- Table 1: how many different surgeries do these healthcare professionals represent?

  The participants were recruited from 12 different practices. The manuscript has been amended to make this clear.

- The theme about the enhanced role of the pharmacist is more descriptive than analytical.

  The manuscript has been edited to become less descriptive.

Discussion:

- The discussion does not seem to stem from the results. Even though it was one of the main objectives, the theme about oral health was underdeveloped and under discussed.
- The lack of interviews with dental staff in this piece of work reinforces the segregation that the authors are describing and critiquing. The voice and opinion of the dental staff are needed to support the validity of the study and the recommendations.
- The authors recommend dentists have access to SCR however this did not stem from the results. How would that address the problem that was raised by the participants.

  Changes made to the discussion and results section; further emphasis has been placed on limited knowledge of oral health, supported by references suggested by another reviewer. There is also a greater focus on the need for interprofessional education and discussion on the issues caused by a lack of access to medical records with examples of how this could improve patient safety provided. Whilst relevant, it was not in the scope of this particular research question to include interviews with dental staff.

COREQ list:

- item 13 (non-participation) was not on page 22 as indicated in the checklist

  Amended.

- item 32: it was not clear which were the minor themes

  A coding tree has been included as a supplementary file.

Reviewer: 3

Thank you for inviting me to review this paper which highlights the collaborative relationship between GPs, practice nurses and pharmacists in caring for patients. While this is reflected in the growing inter-professional role pharmacists play in primary health care including around the prevention and management of long-term conditions, medication reviews and implementing medication safety, offering advice and guidance is less common in oral health, the focus of the paper. Poor oral health is a widespread and significant problem and while non-oral health professionals such as GPs and pharmacists offer patients advice on preventing and managing oral disease, evidence suggests minimal interaction with dentists including whether such advice or management is communicated back to dentists. As the authors conclude, the lack of integration between oral and general health care services can detrimentally affect patient care and safety.

Many thanks for highlighting the issues faced in practice in relation to a lack of integration between oral and general health, and your constructive comments on our manuscript.

- For the non-UK reader, some context about health services and costs to patients for oral and general health care would be helpful.

  Further context has been provided in the introduction to explain to the non-UK reader.

- In the methodology section, health professionals included pharmacists, GPs, a practice nurses and a practice manager – but no dentists. While this is acknowledged in the Limitations section, an explanation would be helpful of why dentists were not included given the topic is oral health and the focus is inter-professional practice in primary health care.

  Whilst relevant, it was not in the scope of this particular research question to include interviews with dental staff. This has been acknowledged as a limitation of the study in the discussion.

- Findings suggest that pharmacists and GPs face challenges around giving advice to patients on prevention and management of oral health conditions such as dental pain or infection. These include limited oral health knowledge with inadequate information offered in their respective trainings, and continuing professional development; dentists not having access to medical records and insufficient flow of information between medical and dental services on managing patients' oral health. Given the prevalence of chronic disease and the negative impact on oral health of some medications, are there protocols or procedures around GPs or pharmacists contacting the patient's dentist if medication has been prescribed or changed?

  We agree that this is an important issue affecting current practice. There were no formal protocols or procedure identified by the participants and this is also the experience of the

authors in clinical practice. This is picked up on in the discussion and highlighted as a potential patient safety issue.

- Limited contact and a lack of collaboration between primary health care providers such as GPs and pharmacists with dentists not only negatively affects health outcomes and patient safety, as alluded to in the paper, but also highlights this as a significant systemic issue. The authors' findings offer strong evidence of the shortfalls in the health system when dentists are not included in inter-professional primary health care approaches to address poor oral health.

  Many thanks for this comment. We hope this paper can add to the literature and provide evidence that can help to change current practices.

A more critical discussion that responds to the 'so what' question posed by the findings could help inform the translation process.

- For example, what specific systemic issues need to be addressed so optimum oral health care is provided eg around education and training of health professionals or ensuring MHRA safety alerts are actioned?

  Discussion amended to highlight the clear need for further education of non-dental healthcare professionals specifically in relation to the links between oral and general health.

- How can the perceived historic segregation between doctors and dentists be addressed so it is not a barrier to optimum patient care and safety related to oral health?

  The discussion has been amended to include the need for further interprofessional education to improve collaboration, reduce isolation of dental services and optimise patient care.

- Who is responsible for establishing formal referral pathways between medical and dental services? Pharmacists clearly play an integral role in the interaction and management between oral health and high risk medications to ensure good health outcomes and patient safety. Do pharmacists inform dentists of their rapidly evolving role and current scope of practice in relation to oral health?

  The discussion has been amended, as above, to highlight the need for interprofessional education. We believe that this can improve collaboration and can allow each professional group to not only learn with, but to learn about each other.

- Findings suggest pharmacists would like to play a greater role in offering oral health advice to patients but need guidance from service commissioners for complex interventions and inter-professional collaboration with dentists. Who are service commissioners and what is their role?

Healthcare services in the UK can be commissioned locally or nationally to address specific needs. We have amended the manuscript to also include the need for direction by professional bodies in order to engage with more complex interventions in both the results and discussion section.

- Do dentists need to be involved in this process as part of patient care and safety and if so, how can this be achieved?

Absolutely, again this comes into out discussion about the need to engage the professional bodies and through interprofessional education.

- How can GPs and pharmacists improve collaboration with dental professionals so correct information flows between medical and dental services?

We believe that both groups have the ability to improve collaboration, however out study focusing on clinical pharmacists particularly identifies a role in relation to prescribed medications and general oral health promotion. We have highlighted that shared medical records between medical and dental services would significantly aid collaboration and have identified that pharmacists working in general practice especially have a role in maintaining acute medication histories for patients. The changes to the manuscript to highlight the above points should make this section more focused.

Reviewer: 4

Since the manuscript has merits and the authors performed as sufficient study,

I'd like to post my suggestions to improve the paper for potential publication

Many thanks for your constructive comments on out manuscript.

For my point of view the manuscript needs a major revision.

- First and beforehand the authors should clearly state the realistic scope of activities, which should (better could) be covered by pharmacists in terms of oral health support for patients/ dentists.

The manuscript has been amended to include a statement of potential oral health related activities by pharmacists in this setting.

- This goes in hand with a discussion of overlapping competences to dentists, dental hygienists, dental therapists. For now, the reader does not know what pharmacists concretely could do (in the setting of the health system and their daily obligations as well as their education). This hinders the understanding of the results section.

  As above, the manuscript has been amended to make this clearer, which allows the reader to transition into and better comprehend the results section.

- Regarding the results section, the authors should give a coding tree or at least an overview of themes/topics which were underlying the selection of the presented essence of report.

  A coding tree has been provided as a supplementary file

As there is only little research about intersectional care between dentists and other specialities (such as pharmacists), the authors should at least refer to the current literature to discuss their results and objectives also on basis of professional perceptions. My hypothesis is that interviewed pharmacists have addressed this aspect.

- Therefore I also suggest that the authors refer and cross check following papers:

  Investigating physicians' and patients' oral health knowledge: a field needed interdisciplinary policy making approach: July 2019 International Journal of Health Promotion and Education; DOI: 10.1080/14635240.2019.1638813

  GPs' and dentists' experiences and expectations of interprofessional collaboration: Findings from a qualitative study in Germany: March 2017BMC Health Services Research 17(1):179

  Development of an HL7 FHIR Architecture for Implementation of a Knowledge-based Interdisciplinary EHR: July 2019 DOI: 10.3233/SHTI190067

  Many thanks for providing these additional references. Each of these has been cited in the manuscript.

VERSION 2 – REVIEW

REVIEWER	Dr Meng-Wong Taing The University of Queensland
REVIEW RETURNED	17-Sep-2019

GENERAL COMMENTS	While I accept the use of GT as explained by the authors to create explanatory theories, the article appears descriptive, whereas my understanding of GT involves relating and integrating the concepts to generate an explanatory theory in this substantive area of inquiry.

REVIEWER	Shereen Nabhani-Gebara Kingston University London UK
REVIEW RETURNED	01-Nov-2019

GENERAL COMMENTS	I am happy with the changes that were implemented. However, I would recommend that the methodology section be altered to reflect a more accurate representation of the analysis approach which was predominantly framework analysis and not grounded theory as currently stated.

REVIEWER	Angela Durey Senior Research Fellow University of Western Australia Australia
REVIEW RETURNED	19-Sep-2019

GENERAL COMMENTS	While the revisions have strengthened the paper, I think the title could better reflect content of paper with more focus on oral health, something like "We don't seem to engage with dentists". A qualitative study of providing oral health care in a primary healthcare setting in the North East of England: Perceptions of general practice staff and patients. Abstract: In Theme 3 of results 'the disparate context of multidisciplinary working in oral health' needs rewording for clarity. In the Conclusion, I was surprised that, given the prevalence of dental disease noted in the paper, the importance of inter-professional oral health education and collaboration was not noted. Strengths and limitations. In the second point, I suggest the lack of inclusion of dentists in the study is highlighted as a limitation (as it stands, it is implied but not stated as a limitation). I am not sure why the fourth point is a presumed strength of the study. Surely providing information about the project and gaining informed consent from the participant is integral to any research project? Method: p9 under Design – semi-structured interviews with whom? Results –P13 L30-31 what do you mean by '…more advanced, patient facing clinical services…'? Section 2,3 and 4 suggest to me that not engaging the dental profession or having clear referral pathways is a significant barrier to providing high quality, safe oral health care to patients and could be more strongly emphasised. P 12. Enhanced clinical roles for pharmacists – more information needed on how pharmacists who 'do a lot of diagnostics and treating' patients communicated their actions to the team. Discussion P19 Your findings suggest that lack of communication between medical and other health professions with the dental profession highlights a major shortfall in the system -something that could be stated more strongly eg 'Further consideration and action is needed at the level of policy and practice if patient safety and quality care are in an oral health context are to be implemented and sustained in a non-dental setting.'

	P21 Final para. Suggest a sentence reflecting the potential of further enhancing the quality and safety of providing oral health care to patients through collaboration between pharmacists and other members of the primary health care team and the dental profession. References: check in text references for consistency with journal style eg under heading Design. Also in reference list, check for inconsistencies in capitalisation eg in article titles. Ref 26 – revise to Huberman

REVIEWER	Fabian Huettig Tuebingen University Hospital, Tübingen, Germany
REVIEW RETURNED	10-Oct-2019

GENERAL COMMENTS	Dear authors, Your paper improved significantly especially by providing the supplementary materials which allow a closer look about the content. Anyhow, I am still missing a hypothesis or rather an exspectation what kind of action the Pharmacists could concretely take and in the end a conclusion to what extent this is happening, realistic or unrealistic for now. Please give a summary of barriers and enablers to enable researchers and decision makers to take action towards an improvement. Please also adapt your abstract. Thank you for performing and sharing your research and I am looking forward to the publication. The reviewer provided a marked copy with additional comments. Please contact the publisher for full details.

VERSION 2 – AUTHOR RESPONSE

Reviewer: 1

• While I accept the use of GT as explained by the authors to create explanatory theories, the article appears descriptive, whereas my understanding of GT involves relating and integrating the concepts to generate an explanatory theory in this substantive area of inquiry.

The manuscript, in response to your comments and those of the other reviewers has been amended. We have removed the reference to GT and emphasised that this was an interpretive study utilising an iterative approach to data collection and analysis.

We have also amended the manuscript to provide a better explanation of findings, in particular in the discussion and the conclusion of the paper.

Reviewer: 2

• I am happy with the changes that were implemented. However, I would recommend that the methodology section be altered to reflect a more accurate representation of the analysis approach which was predominantly framework analysis and not grounded theory as currently stated.

Framework analysis was used to help facilitate the process of constant comparative analysis and to identify salient themes. The manuscript has been amended to include a more detailed explanation of the stages involved with framework analysis.

Reviewer: 3

• While the revisions have strengthened the paper, I think the title could better reflect content of paper with more focus on oral health, something like ‘‘We don’t seem to engage with dentists”: a qualitative study of the role of pharmacists in providing oral health advice and collaborations with dentists in a primary care setting in the north east of England; perceptions of general practice staff and patients.

We have amended the title so to better reflect the content of the paper.

• Abstract: In Theme 3 of results ‘the disparate context of multidisciplinary working in oral health’ needs rewording for clarity.

Amended to clarity further

• In the Conclusion, I was surprised that, given the prevalence of dental disease noted in the paper, the importance of inter-professional oral health education and collaboration was not noted.

Conclusion amended to highlight this important point.

• Strengths and limitations. In the second point, I suggest the lack of inclusion of dentists in the study is highlighted as a limitation (as it stands, it is implied but not stated as a limitation).

This section has been amended to make this limitation clearer

• I am not sure why the fourth point is a presumed strength of the study. Surely providing information about the project and gaining informed consent from the participant is integral to any research project?

This point has been removed and is already explained in the method section of the paper.

• Method: p9 under Design – semi-structured interviews with whom?

Amended to make this clearer

• Results –P13 L30-31 what do you mean by ‘…more advanced, patient facing clinical services…’?

Amended to make this clearer in the manuscript.

• Section 2,3 and 4 suggest to me that not engaging the dental profession or having clear referral pathways is a significant barrier to providing high quality, safe oral health care to patients and could be more strongly emphasised.

Amended by track changes in the results section and also further highlighted in the discussion and conclusion.

• P 12. Enhanced clinical roles for pharmacists – more information needed on how pharmacists who ‘do a lot of diagnostics and treating’ patients communicated their actions to the team.

Results section amended by track changes to also emphasise that pharmacists in this setting have access to full clinical records which facilitates a higher level of clinical input, as well as allowing effective communication with the rest of the practice team.

• Discussion P19 Your findings suggest that lack of communication between medical and other health professions with the dental profession highlights a major shortfall in the system -something that could be stated more strongly eg 'Further consideration and action is needed at the level of policy and practice if patient safety and quality care are in an oral health context are to be implemented and sustained in a non-dental setting.'

Thank you for this, your suggested statement has been added to the manuscript to better make this point.

• P21 Final para. Suggest a sentence reflecting the potential of further enhancing the quality and safety of providing oral health care to patients through collaboration between pharmacists and other members of the primary health care team and the dental profession.

Manuscript amended to further emphasise this point.

• References: check in text references for consistency with journal style eg under heading Design. Also in reference list, check for inconsistencies in capitalisation eg in article titles.

Corrected via track changes

• Ref 26 – revise to Huberman

Corrected via track changes

Reviewer: 4

• Anyhow, I am still missing a hypothesis or rather an expectation what kind of action the Pharmacists could concretely take and in the end a conclusion to what extent this is happening, realistic or unrealistic for now. Please give a summary of barriers and enablers to enable researchers and decision makers to take action towards an improvement.

The end of the introduction has been amended to address your recommendation and provide some suggested actions that pharmacist in this setting could take. Whilst the purpose of our qualitative study is not to generate a hypothesis, the discussion and conclusion sections have also been amended to highlight the findings of our research and the barriers/enablers to improving oral healthcare in a primary care setting.

• Please also adapt your abstract. Please see attached for summary of comments.

Amendments made by track changes in response to comments.

VERSION 3 – REVIEW

REVIEWER	Dr Angela Durey University of Western Australia, Australia
REVIEW RETURNED	21-Nov-2019

GENERAL COMMENTS	Thank you for revising your paper and I am happy with your changes apart from the title which could be briefer eg 'We don't seem to engage with dentists': A qualitative study of primary healthcare staff and patients in the North East of England on the role of pharmacists in oral health care. P9 L20 amend reference to reflect journal style P20 L2 Suggest '…reduce the risks of dentists inadvertently prescribing medication that negatively interacts …settings'. Risks for dentists and doctors?

REVIEWER	Fabian Huettig, DMD, Ph.D. University Hospital Tuebingen, Eberhard Karls Universität Tubingen, Germany
REVIEW RETURNED	02-Dec-2019

GENERAL COMMENTS	The revision addressed all points and the whole manuscript became more balanced with the recent changes. Thus, I would recommend publishing the manuscript.

VERSION 3 – AUTHOR RESPONSE

Many thanks for your comments and we believe that our paper has improved significantly through the peer review process.

The title has been amended to reflect the suggestion of Reviewer 3.
The reference on P9 has been corrected to match the journal format.
The text has been amended on P20 to include 'negative' interactions and to indicate that this is relevant to both doctors and dentists.