

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)	Medical Management of Acute Upper Respiratory Infections in an Urban Primary Care Out of Hours Facility; Cross Sectional Study of Patient Presentations and Expectations
AUTHORS	O'Connor, Raymond; O'Doherty, Jane; O'Regan, Andrew; O'Neill, Aoife; McMahon, Claire; Dunne, C.

VERSION 1 – REVIEW

REVIEWER	Reviewer name: Dr Kerina Denny Institution and Country: Gold Coast University Hospital, Southport, QLD, 4215, AUSTRALIA Competing interests: None declared
REVIEW RETURNED	21-Aug-2018

GENERAL COMMENTS	<p>Thank you for the opportunity to review this manuscript titled “Medical management of Acute Respiratory Infections in an Out of Hours Centre; Patient Presentations and Expectations”</p> <p>This study addresses an important issue, namely the importance of understanding patient’s expectations when they present to an after-hours service for management/treatment of a condition that rarely needs urgent interventions/prescriptions.</p> <p>However, there are several potential significant issues and limitations that need to be addressed prior to publication.</p> <p>Background</p> <ol style="list-style-type: none">1. The authors should be clearer as to whether ARTI includes both upper and lower respiratory tract infections or just upper respiratory tract infections (page 7, lines 116-117). If the latter is included, this would require significant changes to the focus of the manuscript, particularly given that LRTIs may include patients with pneumonia who are more likely to benefit from interventions such as antibiotics.2. The authors should be clearer as to what constitutes inappropriate antibiotic prescribing (unnecessary vs wrong antibiotic choice etc.) (page 7, line 118). <p>Methods</p> <ol style="list-style-type: none">1. A copy of the questionnaire should be included as supplementary material, so that questions can be reviewed and the study replicated.2. There is no comment regarding whether face validity of the questionnaire was assessed3. There is no comment on whether questionnaires were de-identified for storage4. The sample size calculation is not adequately justified.
-------------------------	---

5. An ethics approval number may need to be cited in the methods (check specific journal requirements)

6. How was it decided what ~400 patients received questionnaires out of the total cohort of 11455 patients presenting for ARTIs during the study period? This needs to be explained clearly to rule out significant bias.

Results

1. It would be worthwhile knowing whether the expectations of those patients who indicated that this was not their first consultation for this illness had different expectations from those patients wherein it was their first consultation for the illness

2. Table 1 would benefit from having an additional column next to it the patient characteristics (gender, age and eligibility for free care) from the entire population presenting during the study period to more easily demonstrate whether the sample size was representative.

3. It was stated that “white older people” were more likely to be ‘unsure’ of whether they will need antibiotics or not. This is the first mention of racial background, which wasn’t specified in the methods (see page 13, lines 260-261). There is also not enough statistical information included in this sentence to justify the use of the term “more likely”

4. There is not enough statistical information provided in the manuscript to justify the use of the terms “no differences” or “more likely” in the paragraph pertaining to patient expectations based on symptom (page 13, lines 266-271) or in Table 2.

Discussion

1. The use of the term “only” with regards to patients expecting an antibiotic (page 15, line 283) needs to be supported not only based on other studies but also based on information that this would be close to a clinically acceptable rate of antibiotic prescribing based on the presenting symptoms of this population (or not...). I personally would not use the term “only” as too emotive, and would instead state that it is lower than some other reports as I suspect that this is still a very large proportion of patients considering how ineffective antibiotics are for many URTIs.

2. PCP should read HCP which was previously defined (see page 16, line 294)

3. Regarding page 16, lines 295-296 in the manuscript. This statement was not adequately statistically demonstrated in the results section.

Strengths and Limitations

1. Reception (presumably non-medically trained) staff were charged with the tasks of distributing questionnaires. Thus a potential limitation is that they may have not correctly identified (and therefore missed) a cohort of patients who had acute respiratory tract infections.

	<p>2. This is a single centre study and therefore it is susceptible to many biases not addressed in the manuscript, including generalisability to other centres. Does the population studied in this particular OOH service reflect those seen in OOH services throughout Ireland and/or the UK?</p> <p>3. A significant limitation that should be stated is that the desire for antibiotics was not assessed against the clinician-assessed need for antibiotics</p> <p>4. Reporting the specific demographics of the 5% who refused to participate could be worthwhile.</p> <p>5. It is a limitation that severity/duration of illness was not assessed.</p> <p>Other</p> <p>1. PCPs was initially not defined, then defined, and then not included in the abbreviations at the bottom of the manuscript</p> <p>2. Table D in supplementary material is not appropriately cited</p>
--	---

REVIEWER	Reviewer name: Brian Bell Institution and Country: University of Nottingham UK Competing interests: None declared
REVIEW RETURNED	29-Aug-2018

GENERAL COMMENTS	<p>I think this is an interesting study that addresses an important problem. From Table 3, it appears that most patients were unsure if they required an antibiotic, although it should be noted that more patients expected an antibiotic than didn't expect one, so more work needs to be done on communicating to patients that antibiotics are not appropriate for ARTI. The authors also note that most patients who re-consult receive antibiotics so patients may believe that persistence pays off in this regard. In the conclusions the authors rightly state that the communication and clinical skills of staff need to be optimized to ensure a reduction in antibiotic prescribing. One limitation to the study that was not adequately discussed (which I why a said NO above) was Table B that provides the ages of the participants. I notice that the age bands for the facility as a whole differ from the sample. It seems that very few older people (56+) were sampled (5.3%). This sample would be even smaller if the authors used the age band 65+ which they used for the facility as a whole. Perhaps the results would have been different if older people were better represented in the sample? The authors need to address this issue and present it as a limitation.</p>
-------------------------	--

VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

Background

1. Be clearer as to whether ARTI includes both upper and lower respiratory

tract infections or just upper respiratory tract infections (page 7, lines 116-117).

- Response: This sentence has been amended to read: “Acute upper respiratory tract infection (acute URTI), which incorporates the term “upper respiratory infection” (URTI), describes infections of the upper airways” on lines 121-122. We have also amended the term “ARTI” to “acute URTI” in the title and throughout the manuscript (lines 44 – 434). We have used the reference Harris 2016 (Reference 13 on lines 518-521).

2. Be clearer as to what constitutes inappropriate antibiotic prescribing (unnecessary vs wrong antibiotic choice etc.) (page 7, line 118).

- Response: This sentence has been amended to read “These prescriptions are often inappropriate in that they may be unnecessary, lead to increased antibiotic resistance and put patients at risk of adverse events” (lines 123-125). We have used the reference Harris 2016 (Reference 13 on lines 518-521).

Methods

1. In Methods, Study Setting, we have added “has 12 branches throughout the region” (line 177) for purposes of clarification. We have then made a new sentence beginning with “It has” (line 177).

2. A copy of the questionnaire should be included as supplementary material, so that questions can be reviewed and the study replicated.

- Response: A copy of the questionnaire has been included as appendix 1.

3. In Methods, Participants, for clarification we have added “The trained reception staff are experienced at working in a supervised clinical setting out of hours” (Lines 187-188).

4. There is no comment regarding whether face validity of the questionnaire was assessed.

- Response: This was assessed. We have inserted the lines “The modified questionnaire was piloted among non-medical staff and students in the medical school who were not associated with the study to ensure face validity (see appendix 1)” in the Measures section (lines 216-217).

5. There is no comment on whether questionnaires were de-identified for storage.

- Response: This was done. We have inserted the sentence “Completed questionnaires were de-identified for storage where patients had entered identifying data on the questionnaire during its completion” (lines 218-219).

6. The sample size calculation is not adequately justified.

- Response: The sample size calculation was based on the most conservative estimate of the sample size required to estimate the percentage of patients expecting antibiotics with a margin of error of 5% and 95% confidence. This calculation assumed a randomly selected sample, however we acknowledge that ours was a convenience sample of 435 patients, recruited consecutively at a single treatment centre of the regional OOH service over a 4 month period between October 2017 and February 2018. We were reliant on treatment centre staff to distribute the questionnaire over this time period, however the sample size represents one in four of the 1715 patients with acute URTI who attended this treatment centre (this information has been added to the Results) and 3.8% of the 11,455 face-to-face consultations for acute URTI at all 12 treatment centres of the OOH service in the region during the same period. We have therefore changed the sample size to now read:

“It was calculated that a random sample of 400 patients would be required to estimate the percentage of patients expecting a prescription for antibiotics with 95% confidence and a margin of error of 5%. While our sample is not randomly selected, this sample size calculation was used to guide recruitment” (lines 197-200). Also in the results section we have added a sentence for further clarification: “This sample represents one in four of the 1715 patients with ARTI who attended this treatment centre from October 2017-February 2018 and 3.8% of the 11,455 face-to-face consultations for acute URTI at all treatment centres of the OOH service in the region during the same period” (lines 244-247).

We have compared the characteristics of our sample to the characteristics of all patients with ARTI attending this treatment centre in the same time period and while the gender of the patients is similar, older patients and those not eligible for free care are under-represented. We acknowledge this and its potential impact in the Discussion. We also add: “Although older people are under-represented...” (lines 364-365).

7. An ethics approval number may need to be cited in the methods (check specific journal requirements).

- Response: This has been done. “Reference number 068/17” has been added on line 231. “Ethics Approval Number: 068/17” has also been added (line 439).

8. How was it decided what ~400 patients received questionnaires out of the total cohort of 11455 patients presenting for ARTIs during the study period? This needs to be explained clearly to rule out significant bias.

- Response: This has been explained above in point no 6 above.

Results

1. It would be worthwhile knowing whether the expectations of those patients who indicated that this was not their first consultation for this illness had different expectations from those patients wherein it was their first consultation for the illness.

- Response: This is an excellent point raised by the reviewer. We did actually look at this and found no association between first or subsequent consultation for this illness and expecting an antibiotic ($p= 0.35$). We did not include this negative finding in the paper due to consideration of space.

2. Table 1 would benefit from having an additional column next to it the patient characteristics (gender, age and eligibility for free care) from the entire population presenting during the study period to more easily demonstrate whether the sample size was representative.

- Response: Due to the limitations of the analysis function of the OOH facility, only gender characteristics could be measured for those attending the single urban OOH service for acute URTI where the study took place. Age categories and eligibility for free care could only be measured for the total numbers attending all branches of the OOH facility during the study period. The comparative figures are available in Supplementary Material Tables A, B and C.

Table 1 has been amended to include information on “Expecting antibiotics pre consultation”. Also the title of the table has been altered to “Patient characteristics and pre-consultation antibiotic expectations” (line 261). Also “N” on the same line in the second column has been changed to “n”.

The following has also been added to the table:

Expecting Antibiotics Pre Consultation

Yes 149 (34.3)

No 45 (10.3)

Unsure 241 (55.4)

3. It was stated that “white older people” were more likely to be ‘unsure’ of whether they will need antibiotics or not. This is the first mention of racial background, which wasn’t specified in the methods (see page 13, lines 260-261). There is also not enough statistical information included in this sentence to justify the use of the term “more likely”.

- Response: This is a misprint and should have read “while older people...”. The sentence has been amended to give the statistical information and now reads: “Also using Pearson’s test, there was a statistically significant difference in expecting an antibiotic for gender and age in that males were less likely to expect an antibiotic than females $p=0.008$) and older people (56+) were more likely to be ‘unsure’ whether they needed antibiotics or not ($p=0.026$)” (Lines 279-282).

Also at the beginning of the section “Patient Expectations” this sentence has been inserted:

“Patient expectations for each symptom are illustrated in figure 1 and described in table 2”. Table 2 also gives the overall expectation for each potential response of the HCP” (lines 270-271).

Also for clarity, in table 2 we have deleted the second row (every box contains the word “yes” which we feel is unhelpful), and moved the title “Symptom” to the top of the left column (line 294).

Also for clarity, in table 2 we have also moved the third row labelled “Overall Expectation” to the end of the table and put it in bold (line 294).

4. There is not enough statistical information provided in the manuscript to justify the use of the terms “no differences” or “more likely” in the paragraph pertaining to patient expectations based on symptom [page 13, lines 266-271] or in Table 2.

- Response: This paragraph entitled “Differences between patient expectation, expecting and antibiotic and symptom presented” has been re written. It now reads: “Patient expectations for each symptom are described in Table 2. For each symptom presented, patient expectations of further examination, information or reassurance were similar, with approximately half those who presented with each symptom reporting an expectation to receive these treatments. A large proportion of patients presenting with symptoms of an earache (67%) or cough (65%) reported expecting to receive pain relief. A large proportion of patients presenting with sinusitis (60%) or cough (62%) symptoms reported expecting to receive cough medication” (lines 287-293).

Discussion

1. The use of the term “only” with regards to patients expecting an antibiotic (page 15, line 283) needs to be supported not only based on other studies but also based on information that this would be close to a clinically acceptable rate of antibiotic prescribing based on the presenting symptoms of this population (or not...). I personally would not use the term “only” as too emotive, and would instead state that it is lower than some other reports as I suspect that this is still a very large proportion of patients considering how ineffective antibiotics are for many URTIs.

- Response: The word “only” has been removed and as the reviewer kindly points out we instead keep the text comparing our figure with the international literature.

2. PCP should read HCP which was previously defined (see page 16, line 294).

- Response: This has been amended throughout the document (lines 314, 339).

3. Regarding page 16, lines 295-296 in the manuscript. This statement was not adequately statistically demonstrated in the results section.

- Response: We thank the reviewer for pointing this out. This sentence has been deleted (line 315).

Strengths and Limitations

1. Reception (presumably non-medically trained) staff were charged with the tasks of distributing questionnaires. Thus a potential limitation is that they may have not correctly identified (and therefore missed) a cohort of patients who had acute respiratory tract infections.

- Response: This has been added as a limitation and reads: “Reception staff who were not medically trained were charged with the tasks of distributing questionnaires. This is a potential limitation in that they may have not correctly identified (and therefore missed) a cohort of patients who had acute respiratory tract infections. However the note of the patient’s initial presenting symptom to the call centre was available to reception staff which would have minimised this” (lines 407-412).

2. This is a single centre study and therefore it is susceptible to many biases not addressed in the manuscript, including generalisability to other centres. Does the population studied in this particular OOH service reflect those seen in OOH services throughout Ireland and/or the UK?

- Response: This has been added as a limitation. The sentence “As this is a single centre study, the population studied in this particular OOH service may not reflect those seen in OOH services throughout Ireland and/or the UK” has been added (lines 71-72 and 401-402). Also we have added the word “urban” to one of our limitations (line 397).

3. A significant limitation that should be stated is that the desire for antibiotics was not assessed against the clinician-assessed need for antibiotics.

Response: This has been added as a limitation and reads: "The patient's desire for antibiotics was not assessed against the clinician-assessed need for antibiotics. However the point of the study was to assess overall patient expectation" (Lines 412-414).

4. Reporting the specific demographics of the 5% who refused to participate could be worthwhile.

- Response: This was not assessed and has been added as a limitation. We have added "The demographics of those who refused to participate were not studied" (lines 400-401).

5. It is a limitation that severity/duration of illness was not assessed.

- Response: This has been included as a limitation. We have added: "Severity and duration of the illness was not assessed which may have affected patient expectation for antibiotics" (Lines 414-415).

Other

1. PCPs was initially not defined, then defined, and then not included in the abbreviations at the bottom of the manuscript.

- Response: PCP has been changed to HCP. This has been amended throughout the document (lines 314, 339).

2. Table D in supplementary material is not appropriately cited.

- Response: Thank you. The citation for Table D has been amended and now reads: "This is illustrated in Table D in Supplementary Material" (lines 309-310).

3. In the Discussion section, for clarity we have changed a sentence to now read: "Our study showed no association between a patient's eligibility for free care (or paying for their consultation) and expectation of".... (lines 344-345).

4. Also in the discussion section and for clarity we have added "weekend, (line 372).

5. We have added to the strengths of the study the following:

"The study used a previously validated questionnaire that was adapted and piloted by a multi-disciplinary research and clinical team" (lines 65-66).

"The research was conducted over four consecutive months which would mitigate the effects of any public health campaigns aimed at reducing antibiotic use at the time" (lines 67-68 and 386-388).

"Reception staff received training from the research team and were tasked with identifying and recruiting participants, ensuring that only those with acute URTI symptoms were surveyed" (lines 392-394).

We have also added to a strength beginning “the higher number of private patients (line 394)...” the following: “Previous studies of this subgroup have indicated that they have a higher expectation for antibiotics for acute URTI” (lines 395-396).

6. Abstract Amendment. We have amended to abstract as follows:

Objectives: We have inserted “the expectations of” (line 43)

We have inserted “attending an urban primary care out of hours facility with acute upper respiratory tract infection (acute URTI) regarding” (lines 43-45).

Setting: We have changed this to now read: “One urban primary care out of hours facility located in the Mid-West of Ireland” (line 48).

Participants: We have changed service to facility (line 49);

We have changed respiratory tract infections to URTI (line 50).

Results: we have changed this to now read “25.4% of those attending the single branch where the survey was conducted (n=1715)” (line 54). We have deleted “3.8% of the total number of face to face consultations with ARTI patients at the primary care OOH facility during the study period (11,455)”.

Conclusions: we have changed out of hours to “OOH” (line 59).

7. Authors. GP has been changed to “General Practice” (line 31).

8. Authors. Affiliation of Ms Aoife O’Neill has been changed to Department of Mathematics and Statistics (line 26).

9. Reference numbers have been changed to 47, 67-68 and references 51, 69-72 deleted (line 348). All references have been slightly amended to conform more with BMJ reference style.

10. Acknowledgements: Prof. Molly Courtenay, School of Healthcare Sciences, Cardiff University, Cardiff, UK for permission to adapt their patient questionnaire (lines 460-462).

11. Ray has been changed to Raymond (lines 4 and 11)

12. Brackets in reference 38 have been changed to square (line 146).

13. AH has been removed from the “Authors Contributions” section (lines 452 and 453).

14. Appendix 1 has been referred to in the text “see appendix 1” (line 217).

15. “Strengths and Limitations of this study” has been inserted beneath the abstract as requested by the editor’s response on 26/10/2018 (lines 64-75). This reads as follows:

“Strengths and limitations of this study.

- The study used a previously validated questionnaire that was adapted and piloted by a multi-disciplinary research and clinical team.
- The research was conducted over four consecutive months which would mitigate the effects of any public health campaigns aimed at reducing antibiotic use at the time.
- The higher number of private patient respondents helped to ensure that the finding that they do not expect antibiotics is reliable.

- As this is a single centre study, the population studied in this particular OOH service may not reflect those seen in OOH services throughout Ireland and/or the UK

- The patient's desire for antibiotics was not assessed against the clinician-assessed need for antibiotics. Severity and duration of the illness was not assessed which may have affected patient expectation for antibiotics".

16. The information that was contained in the original "strengths and limitations" has been moved and is now at the end of the discussion just prior to conclusion (lines 385-415).

Reviewer 2:

1. One limitation to the study that was not adequately discussed (which I why a said NO above) was Table B that provides the ages of the participants. I notice that the age bands for the facility as a whole differ from the sample. It seems that very few older people (56+) were sampled (5.3%). This sample would be even smaller if the authors used the age band 65+ which they used for the facility as a whole. Perhaps the results would have been different if older people were better represented in the sample? The authors need to address this issue and present it as a limitation.

- Response: This has been added as a limitation. We have added a line "Older people (over the age of 56 years) are poorly represented in our sample. It is possible that the results would have been different if older people were better represented" (lines 404-406). We have also included in the patient characteristics section of the results section: "Older people (over the age of 56 years) are poorly represented in our sample, making up only 5.3% of the population studied" (lines 258-259). Also in the Discussion section we have added: "Although older people are under-represented" (lines 363-364).

VERSION 2 – REVIEW

REVIEWER	Reviewer name: Kerina Denny Institution and Country: Gold Coast University Hospital Competing interests: None declared
REVIEW RETURNED	13-Nov-2018

GENERAL COMMENTS	<p>The prior revisions have been, for the most part, well addressed and the manuscript improved by them.</p> <p>Major comments:</p> <ul style="list-style-type: none"> - the authors replied that they did indeed assess the expectations of those patients who were first versus repeat clinic attendees. However, in their response it was stated that this was not added to the manuscript as it was a "negative finding" and "space was limited". In my opinion, this is an important negative finding and needs to be included in the paper. - on further reflection, the p values alone in the results are probably not ideal, rather a risk difference with a confidence interval is likely to be more sensible. The authors may wish to seek expert statistical advice <p>Minor comments:</p>
-------------------------	---

	<ul style="list-style-type: none"> - The statement (page 4, line 68) "The higher number of private patient respondents helped to ensure that the finding that they do not expect antibiotics is reliable" does not make sense out of context of the discussion. - The first sentence should read antimicrobial resistance (AMR) not antimicrobial or antibiotic resistance (see page 6, line 112) - "describes infections of the upper airways" is redundant (see page 7, line 121). It would be more beneficial to include examples of what was included as acute URTIs (e.g. otitis media, pharyngitis etc.) - "for example" does not work well here (see page 7, line 133) - it's probably not appropriate to state that the overall age profile was very similar if older people were under-represented (see lines 356-357, page 20 and lines 381-382, page 21). - a 'strange GP' is probably inappropriate wording, rather a GP who is not their regular provider (or something along those lines) - The limitations of non-random sampling also need to be explicitly addressed
--	--

REVIEWER	Reviewer name: Brian Bell Institution and Country: University of Nottingham, United Kingdom Competing interests: None declared
REVIEW RETURNED	11-Nov-2018

GENERAL COMMENTS	The changes that I recommended have been made.
-------------------------	--

VERSION 2 – AUTHOR RESPONSE

Reviewer 1:

Major Comments.

1. The authors replied that they did indeed assess the expectations of those patients who were first versus repeat clinic attendees. However, in their response it was stated that this was not added to the manuscript as it was a "negative finding" and "space was limited". In my opinion, this is an important negative finding and needs to be included in the paper. On further reflection, the p values alone in the results are probably not ideal, rather a risk difference with a confidence interval is likely to be more sensible. The authors may wish to seek expert statistical advice.

- Response: This finding has been inserted into the Results section and it now reads "We explored all the differences between expectation of antibiotics by age group, gender, eligibility for free care and whether or not this was the patient's first consultation for this illness. The results are presented in supplementary table D. Males were more likely to not expect antibiotics (16%) compared to 7% of females (difference = 9%, 95% CI = 3% to 16%, p= 0,002). While those eligible for free care were more likely to expect antibiotics (38%) compared with those who were not eligible, (30%), the difference was not statistically significant (difference = 4%, 95% CI -1% to 17%, p=0.09). Patients receiving a subsequent consultation were more likely to expect an antibiotic (37%) compared to 31% receiving their first consultation, however this difference was not statistically significant (difference = 6%, 95% CI for the difference = -3% to 15%, p=0.20). No patterns were observed in the expectation of antibiotics by age groups (Supplementary table D)." (lines 287-298).

We also inserted in Methods section the lines: "The difference and corresponding 95% confidence interval for the difference between two independent proportions (expectation of antibiotics by gender, age group, eligibility for free care and first consultation) was calculated. The Z test for independent proportions was used to investigate differences between proportions" (lines 228-232).

Because we used differences and 95% confidence intervals helpfully suggested by the reviewer, we deleted the previous text which used p-values only (lines 281-286).

We also inserted into the discussion section: "However an important finding from this study was that no association was identified between whether this was the patient's first or subsequent consultation for the presenting illness and their expectation of being prescribed an antibiotic." (lines 400-403).

We have also developed supplementary table D to show these findings in full.

We have inserted in the List of Supplementary Figure and Table Legends, "Table D: Differences in expectation of antibiotics" (line 499).

We have also changed the order of the supplementary tables because of their order of appearance in the paper. Supplementary Tables A, B and C remain unchanged. However Supplementary Table D now is renamed Supplementary table E (lines 325 and 500).

Please note that the new Supplementary Table D is submitted separately as it is in landscape orientation.

2. Data Availability statement

This has been inserted and now reads: Deidentified participant data are available upon request from the principal author Dr Raymond O'Connor for a 6 month time period from publication. Reuse is permitted with the consent of all of the authors. There is no additional information available. Email Raymond.oconnor@ul.ie (lines 501-505).

Minor Comments:

1. "The higher number of private patient respondents helped to ensure that the finding that they do not expect antibiotics is reliable" does not make sense out of context of the discussion.
3. Response: We have deleted this sentence from the strengths and limitations section indicated by the reviewer (lines 69-70).
2. The first sentence should read antimicrobial resistance (AMR) not antimicrobial or antibiotic resistance (see page 6, line 112)
4. Response: This line has been amended and now reads "Antimicrobial resistance (AMR)." (line 113).
3. "describes infections of the upper airways" is redundant (see page 7, line 121). It would be more beneficial to include examples of what was included as acute URTIs (e.g. otitis media, pharyngitis etc.)
5. Response: We have deleted "describes infections of the upper airways" (line 123). We have inserted "includes infections such as otitis media, pharyngitis, sinusitis and acute bronchitis" (lines 122-123).
4. "for example" does not work well here (see page 7, line 133)

6. We have deleted “for example” (line 132).
5. it's probably not appropriate to state that the overall age profile was very similar if older people were under-represented (see lines 356-357, page 20 and lines 381-382, page 21)
7. Response: We have amended this sentence and changed “very” to “broadly” (line 370) and deleted “age and” (line 381).

The full sentence now reads: “Although older people are under-represented, the overall gender profile of those attending at the OOH facility with acute URTI symptoms are broadly similar to those investigated in this study....” (lines 380-382).

We have also similarly amended the second sentence referred to by the reviewer. This now reads: “The gender profile of our sample is broadly similar to that of the population attending during the study period with acute URTI symptoms, although older people are under-represented” (lines 409-411).

6. A 'strange GP' is probably inappropriate wording, rather a GP who is not their regular provider (or something along those lines).
8. Response: we have amended this to read “locum GP” (line 388).
7. The limitations of non-random sampling also need to be explicitly addressed
9. Response: we have inserted the line: “Another limitation is that ours was not a randomly selected sample. The non-probability nature of our sample means that bias may have been introduced and some groups under-represented.” (lines 423-425).

VERSION 3 – REVIEW

REVIEWER	Reviewer name: Kerina Denny Institution and Country: Gold Coast University Hospital Competing interests: None declared
REVIEW RETURNED	27-Dec-2018

GENERAL COMMENTS	Thank you to the authors who have addressed previous concerns with the manuscript appropriately. A small point would be to remove the word "only" from the abstract conclusions (emotive and subjective language)
-------------------------	--