### PEER REVIEW HISTORY

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### ARTICLE DETAILS

TITLE (PROVISIONAL)	What do we know about demand, use and outcomes in primary care out-of-hours services? A systematic scoping review of international literature
AUTHORS	Foster, Hamish; Moffat, Keith; Burns, Nicola; Gannon, Maria; MacDonald, Sara; O'Donnell, Catherine A

## **VERSION 1 – REVIEW**

REVIEWER	Chris Burton
	University of Sheffield
	UK
<b>REVIEW RETURNED</b>	07-Oct-2019

GENERAL COMMENTS	This is a clear and well written scoping review of a broad topic. For me it finds an appropriate balance between two much and too little
	detail. Thorough and a useful resource for anyone wanting to understand the field.
	I have only one minor question. There is no mention of the issue of frequent attenders / high users and I wonder if this was deliberate? Personally, I think the existence of distinct frequent attenders is entirely an artefact of us trying to impose order on chaos (or at least complexity), so I'm happy that they don't get named (or shamed). Perhaps questions of their existence belong in a
	different paper.

REVIEWER	Gunter Laux
	Dept. of General Practice and Health Services Research,
	University Hospital Heidelberg, Germany
REVIEW RETURNED	14-Oct-2019

GENERAL COMMENTS	The manuscript addresses the important issue of demand, use and outcomes in primary care OOHS.
	The authors try to analyse this at an international level. The paper is well written and structured.
	However, the main finding is trivial: Evidence for increasing patient demand over time was weak due to data heterogeneity, infrequent reporting of population denominators and little adjustment for population socio- demographics.
	The manuscript would have merits, if a) the differences of different primary care OOHS settings in Europe would be pointed out even more clearly AND

b) the scoping review technique and the associated endeavours would be pointed out even more clearly
Then the manuscript would have a more didactic character for researchers not familiar with primary care OOHS and/or scoping reviews.
Minor issue: - Page 7, line 10: Australia instead of "Australasia"

REVIEWER REVIEW RETURNED	Elisabeth Holm Hansen University of South-Eastern Norway 31-Oct-2019
GENERAL COMMENTS	<ul> <li>This manuscript is well written: Distinct, clear and to the point. The method part is clearly decribed in all steps of the process, and the whole manuscripts is in accordance to the prisma checklist. The results part is explicit presented and easy to follow. The discussion is relevant and related both to the results and the objetive.</li> <li>Following on from the conclusion, spesific recommendations is presented.</li> <li>I have no further comments or suggestion for major or minor revision.</li> </ul>

## VERSION 1 – AUTHOR RESPONSE

Reviewer's Comment	Authors' Response.
Reviewer 1 (Chris Burton).	
1.1. This is a clear and well written scoping review of a broad topic. For me it finds an appropriate balance between two much and too little detail. Thorough and a useful resource for anyone wanting to understand the field.	Thank you for your kind comments regarding our paper.
1.2. I have only one minor question. There is no mention of the issue of frequent attenders / high users and I wonder if this was deliberate? Personally, I think the existence of distinct frequent attenders is entirely an artefact of us trying to impose order on chaos (or at least complexity), so I'm happy that they don't get named (or shamed). Perhaps questions of their existence belong in a different paper.	We appreciate the question regarding the lack of mention of frequent attenders. We acknowledge frequent attenders as a type of patient focus in Table 1 (page 31). We chose not to discuss 'frequent attenders' in any detail because the results of the studies that describe the characteristics of frequent attenders are broadly similar to the more common studies that describe the characteristics associated with increased OOHS use (Table 3; Page 37). We also agree that labelling individuals as 'frequent attenders' may be unhelpful as it may be imposing non-existent order on real-life complexity, as the reviewer suggests. Further, that labelling may perpetuate a stigma towards those who use OOHS (possibly appropriately) above an arbitrary threshold.

Reviewer 2 (Gunter Laux).	
2.1. The authors try to analyse this at an international level. The paper is well written and structured.	Thank you for these comments.
2.2. However, the main finding is trivial: 'Evidence for increasing patient demand over time was weak due to data heterogeneity, infrequent reporting of population denominators and little adjustment for population socio- demographics.'	We are sorry that the reviewer finds our main finding trivial, but we respectfully disagree. We believe the finding of a lack of robust evidence to document increasing demand of OOHS, which most practitioners would suggest is a feature of OOHS provision, is surprising given the large amount of work that has gone into trying to understand OOHS use and demand. We believe that the issues of data heterogeneity, infrequent reporting of denominators and lack of adjustment for population socio-demographics limit the ability of service providers to compare demand across services or even within a service over time. This is, we believe, an important issue and one that needs to be addressed if services want to monitor future demand. These views are made clear in both our discussion section (page 15) and abstract conclusion.
2.3. The manuscript would have merits, if a) the differences of different primary care OOHS settings in Europe would be pointed out even more clearly AND	We acknowledge the comment about the merits of pointing out the different primary care settings in Europe more clearly. However, that was not the aim of our work. We do not have an explicit focus on Europe but instead have a focus on UK or any similar international primary care setting with recognised OOHS i.e. Europe, Australasia, US or Canada. (Inclusion criteria, Box 1, page 7). There are many different settings internationally that would meet this criterion and, therefore, describing them all is beyond the scope of this manuscript. Further, we discuss how there is a lack of contextual data in the literature (page 5, lines 3-5) meaning that detailed descriptions of settings are not currently possible. Also, in the conclusion (Page 17), we point out how there is a lack of service definitions making comparisons across countries difficult. However, we agree that an up-to-date resource outlining OOHS settings and organisations across Europe would be extremely beneficial to researchers and service deliverers.

2.4. b) the scoping review technique and the associated endeavours would be pointed out even more clearly	We are unclear what the reviewer means with regard to this comment. We feel that our section entitled Method (Page 5) through to the inclusion and exclusion criteria (Box 1; Page 7) clearly describes our methods. In addition, we referenced some of the key references in relation to scoping reviews (references 10 to 13). We believe the information in Appendix 1 adds further and sufficient detail to understand our search strategy.
2.5. Page 7, line 10: Australia instead of "Australasia"	Thank you for highlighting this. However, we did mean to write 'Australasia' because some of the included studies are from New Zealand as well as Australia.
Reviewer 3 (Elisabeth Holm Hansen).	
<ul> <li>3.1. This manuscript is well written: Distinct, clear and to the point. The method part is clearly described in all steps of the process, and the whole manuscripts is in accordance to the PRISMA checklist. The results part is explicit presented and easy to follow. The discussion is relevant and related both to the results and the objective. Following on from the conclusion, specific recommendations is presented.</li> <li>I have no further comments or suggestion for major or minor revision.</li> </ul>	We thank the reviewer for their positive comments on our manuscript.

# VERSION 2 – REVIEW

REVIEWER	Gunter Laux Dept. of General Practice and Health Services Research, University Hospital Heidelberg, Germany
REVIEW RETURNED	04-Dec-2019
GENERAL COMMENTS	Sorry, but my concerns were not addressed at all.