PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	National primary care responses to COVID-19: A rapid review of
	the literature
AUTHORS	Haldane, Victoria; Zhang, Zhitong; Abbas, Raja Faisal; Dodd, Warren; Lau, Lincoln; Kidd, Michael; Rouleau, Katherine; Zou, Guanyang; Chao, Zhuo; Upshur, Ross E.G; Walley, John; Wei, Xiaolin

VERSION 1 – REVIEW

REVIEWER	Liew Su May
	Department of Primary Care Medicine, Faculty of Medicine,
	University of Malaya. Malaysia
REVIEW RETURNED	16-Jul-2020

GENERAL COMMENTS	The objective of this rapid review is to examine available guidelines and policies for diagnosis, treatment, management and support of COVID-19 patients in primary care. This was done using a framework developed to analyse plans for general practice response to pandemic influenza at managerial levels. However, many of the guidelines included in this study referred more to the clinical management of patients in primary care eg Ethiopia, Nigeria and Malaysia. Such guidelines are unlikely to contain information at the health system organisational level such as legislation or financing. Clinical guidelines are also unlikely to include information on national policies such as supply of PPE. This is the major limitation in the review and needs to be clarified as well as included in the limitations. Relevant data and policies may be in other documents that need to be accessed directly from national, state or provincial administrative websites or offices. Although it is stated in the text that the majority of the guidelines were obtained from grey literature, it is not clear as to how many were found from the databases and from websites. It would be good to have an actual PRISMA diagram of the search results. Minor revisions: References for statements are not always present e.g. line 85. Other health systems 'may not' rather than 'are not': line 92 Line about PPI is incomplete: Line 155.

REVIEWER	Jonny Currie Cardiff University, Wales
REVIEW RETURNED	21-Jul-2020
CENEDAL COMMENTS	The involvement of primary care in the reorganization and

GENERAL COMMENTS	The involvement of primary care in the reorganisation and
	significant service pressures caused by COVID-19 has varied

internationally. This review focusses on government guidance but does not provide enough detail to be useful for policymakers or providers of how they could better deliver primary care in this or future pandemics.

It would be useful to have more detail on implementation of such guidance, exploration of the barriers to implementation, what examples there are of innovation, and how successful primary care systems have been in maintaining business continuity to avoid a worsening of non-COVID health outcomes (e.g. vaccination, screening, responses to acute worsening of conditions, management of long-term conditions).

The review touches very little on the engagement by public health agencies of primary care which has varied significantly between countries.

At present the review does not provide enough detail to warrant publication and needs more information on implementation and innovation during the pandemic.

REVIEWER	Prof Bob Mash
	Stellenbosch University, South Africa
REVIEW RETURNED	28-Jul-2020

GENERAL COMMENTS

This is an interesting review and worth publishing. However I think the paper can be improved by attention to the following issues.

The abstract refers to "community-centred primary care", but this concept is not further elaborated on in the text. I wondered if the authors were alluding to "community-orientated primary care" which specifically implies an integration of primary care and public health. In this context, the article should also clearly delineate what it means by primary care as opposed to primary health care.

One of the key findings was regarding the need for "business continuity". I found this term slightly disconcerting and it seemed to imply that the authors were positioning themselves in a private sector perspective, where primary care might well be regarded as a business. This would not be true of those in the public sector.

As with a scoping review it would be helpful to explicitly define the review question(s) that are addressed. The question is implied, but not nailed down. At the end of the introduction it appears that the main aim is to" inform guideline development". If this is the case then the discussion should more explicitly address this - what new knowledge does this review give us to inform national guideline developers (on primary care and COVID-19)?

The nature of the guidelines to be reviewed also seems a little unfocused. The authors speak of clinical guidelines that address "quality of care" and diagnosis, treatment and management of COVID-19 (line 135) while the framework used and actual guidelines seem to address the organization of service delivery and key system inputs (e.g. supply chain, workforce, legislation, medication etc.).

The review clearly searches the grey literature for government guidelines on the re-organization of primary care to address COVID-19. Any confusion with a review of studies or research

articles should then be avoided - see the last bullet point under 'article summary'.

The choice of framework seems reasonable for the deductive interpretation of the data, but may have some limitations in its ability to consider all important components of primary care service delivery. Consider the PHC performance initiative framework for example - maybe a point for the discussion, could the framework chosen have limited your perspective on the strengths and weaknesses of the guidelines?

The concept of selecting "relevant national departments" needs explaining. How did you decide if a department was relevant to your study? This probably links to how countries were selected. This needs more elaboration and clear explanation.

The methods section appears to lack some important details, which are listed in the PRISMA document that the authors completed. More detail is needed on how guidelines were selected from the raw search and finally included in the review. More detail is needed on how data was extracted from the included guidelines. More explanation of how this extracted data was then analysed qualitatively is needed. The results should start with a summary and ideally a flow diagram of how many potential guidelines were in the search, how many excluded any why, how many included at different stages and so on.

The results are presented very much as a simple descriptive analysis with a listing of what different countries included in their guidelines using the structure of the framework. I think the analysis would be stronger and more interesting to read if the findings could be synthesized and interpreted more. For example, in your synthesis and interpretation of the data what was well covered, what was not/less covered and what was the range of different approaches to key issues. Findings and methods should also be expressed in the past tense.

As mentioned previously the discussion would be stronger if it addressed more clearly the central question of the review, and that question(s) was more explicitly stated up front.

A discussion of how countries with different levels of income and resources, and different strengths of PHC systems, approached their guidelines might also be interesting.

In the conclusion and discussion many of the findings seem fairly obvious/common sense and the authors should try and highlight more clearly what new knowledge this review brings to the table.

Specific comments on grammar and clarification of certain sentences are in the pdf file attached.

REVIEWER	Young-Rock Hong University of Florida, USA
REVIEW RETURNED	30-Jul-2020

GENERAL COMMENTS	The topic is very timely and supports the importance of primary care in response to the pandemic situation, which would help
	design and further develop national guidelines for the international community. I commend the authors of this paper for compiling

existing intentional efforts and comprehensively evaluate and summarize effective strategies. I especially liked the part where the authors pointed out limitations identified (eg., patient triage, care coordination between health services organizations) and suggested potential strategies to improve further (eg., community partnership, resource supply chain). Just one minor issue I have lies on Page 5, Lines 90-93. While I agree with the authors to some degree, however, mentioning China's response was expeditious but others were not, may sound controversial without any supporting evidence (and I believe it is not true since other countries are doing their best). I would suggest that the authors should be cautious about mentioning a particular country in this manner (since BMJ has global readership) and, instead, consider removing these sentences. Again, I congratulate the authors on this study and encourage the team to further work on evaluating strategies that would be found as effective in primary care for patients with COVID and non-COVID.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1 Comments:

4. However, many of the guidelines included in this study referred more to the clinical management of patients in primary care eg Ethiopia, Nigeria and Malaysia. Such guidelines are unlikely to contain information at the health system organisational level such as legislation or financing. Clinical guidelines are also unlikely to include information on national policies such as supply of PPE. This is the major limitation in the review and needs to be clarified as well as included in the limitations. Relevant data and policies may be in other documents that need to be accessed directly from national, state or provincial administrative websites or offices.

REPLY: Thank you for this comment, we have added a section to better clarify that this was a finding from our review – some national guidance included information on legislation and financing that supported primary care, whereas some national guidance focused on clinical management of cases. We have added the text:

"In Table 4 we present an overview of the key framework domains and their corresponding response indicators for each country. Our results show that all national primary care guidelines included information on control measures, ways to minimize risk of spread and communication mechanisms. The majority of national guidelines also referred to integrated planning mechanisms for primary care. Fewer national guidelines reported on aspects of clinical service delivery in primary care with only half of countries' offering guidance on surge capacity. Only four of 14 countries' guidance describing access to medication considerations, and fewer described legislative or financing considerations to support primary care. Only national guidance from Canada covered all domains." Line 212

5. Although it is stated in the text that the majority of the guidelines were obtained from grey literature, it is not clear as to how many were found from the databases and from websites. It would be good to have an actual PRISMA diagram of the search results.

REPLY: We have clarified that no peer-reviewed guideline documents for COVID-19 were available and that our documents were comprised of national guidelines from the grey literature, given the early evidence this research is based on. Line 181

6. References for statements are not always present e.g. line 85.

REPLY: We have updated this reference and checked the document to ensure all references are included.

7. Other health systems 'may not' rather than 'are not': line 92

REPLY: We have amended this to say 'may not' Line 100

8. Line about PPI is incomplete: Line 155.

REPLY: We have amended this line.

Reviewer 2 Comments:

9. The involvement of primary care in the reorganisation and significant service pressures caused by COVID-19 has varied internationally. This review focusses on government guidance but does not provide enough detail to be useful for policymakers or providers of how they could better deliver primary care in this or future pandemics.

REPLY: Thank you for your comment, however we feel that this requires a different review that focuses on how the heath system has been organised to deliver services, while our review focused on the contents of national guidelines.

10. It would be useful to have more detail on implementation of such guidance, exploration of the barriers to implementation, what examples there are of innovation, and how successful primary care systems have been in maintaining business continuity to avoid a worsening of non-COVID health outcomes (e.g. vaccination, screening, responses to acute worsening of conditions, management of long-term conditions).

REPLY: We thank you for this comment, however assessing or describing implementation of guidance and related outcomes is beyond the scope of this review but an important area of further inquiry.

11. The review touches very little on the engagement by public health agencies of primary care which has varied significantly between countries.

REPLY: This is an important point, however, the role of public health agencies was not evident in the national guidance documents for primary care and thus out of the scope of the findings.

12. At present the review does not provide enough detail to warrant publication and needs more information on implementation and innovation during the pandemic.

REPLY: Thank you for your feedback on the need for information on implementation and innovation, however as a review of national guidelines, it is out of scope to consider implementation, or innovation, unless recommended in national-level guidelines.

Reviewer 3 Comments:

13. The abstract refers to "community-centred primary care", but this concept is not further elaborated on in the text. I wondered if the authors were alluding to "community-orientated primary care" which specifically implies an integration of primary care and public health. In this context, the article should also clearly delineate what it means by primary care as opposed to primary health care.

REPLY: Thank you for these comments, we have updated the abstract to use the term primary care "The aim of this review is to examine available national primary care guidelines for COVID-19 and to explore the ways in which these guidelines support primary care facilities in responding to the demands of the COVID-19 pandemic." Line 39

And in the discussion, we have brought in the ways our findings support community-oriented primary care: "These activities support and strengthen community-oriented primary care. In community-oriented primary care, primary clinical care for individuals and families is provided with special attention to continuity of care and includes a focus on the demographics and needs of the community as a whole in planning, delivering and evaluating care." Line 464

We have also made clearer in our opening sentence that we are focusing on primary care, which focuses on provision of medical care with the text:

"Primary care focuses on medical care and is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community." Line 89

14. One of the key findings was regarding the need for "business continuity". I found this term slightly disconcerting and it seemed to imply that the authors were positioning themselves in a private sector perspective, where primary care might well be regarded as a business. This would not be true of those in the public sector.

REPLY: Business continuity in this context refers more broadly to operational continuity. We have updated the text to reflect this – do note that in Table 3 "business continuity" is retained in the United Kingdom results as the term "business continuity" is used in their guidelines.

15. As with a scoping review it would be helpful to explicitly define the review question(s) that are addressed. The question is implied, but not nailed down. At the end of the introduction it appears that the main aim is to" inform guideline development". If this is the case then the discussion should more explicitly address this - what new knowledge does this review give us to inform national guideline developers (on primary care and COVID-19)?

REPLY: Thank you for this important feedback, we have clarified our aims statement as the following: "The aim of this review is to examine available national primary care guidelines for COVID-19 and to explore the ways in which these guidelines support primary care facilities in responding to the demands of the COVID-19 pandemic." Line 127

16. The nature of the guidelines to be reviewed also seems a little unfocused. The authors speak of clinical guidelines that address "quality of care" and diagnosis, treatment and management of COVID-19 (line 135) while the framework used and actual guidelines seem to address the organization of service delivery and key system inputs (e.g. supply chain, workforce, legislation, medication etc.).

REPLY: Thank you for raising this issue, this is largely an effect of reviewing national guidelines which are variable in their content – some guidelines focus largely on case identification and management, whereas others incorporate operational and supply chain consideration necessary to the provision of primary care during the COVID-19 pandemic.

17. The review clearly searches the grey literature for government guidelines on the re-organization of primary care to address COVID-19. Any confusion with a review of studies or research articles should then be avoided - see the last bullet point under 'article summary'.

REPLY: We have made it clearer in our methods and results that while we did search the academic literature, our identified studies ended up being from grey literature.

- 18. The choice of framework seems reasonable for the deductive interpretation of the data, but may have some limitations in its ability to consider all important components of primary care service delivery. Consider the PHC performance initiative framework for example maybe a point for the discussion, could the framework chosen have limited your perspective on the strengths and weaknesses of the guidelines?
- REPLY: Thank you for raising this important point, we have added in the limitations section an elaboration of how the framework may have limited the interpretation of the results ". Our study may be also limited by our choice of framework analysis, which may have limited our ability to assess relative strengths and weaknesses of national guidance." Line 522
- 19. The concept of selecting "relevant national departments" needs explaining. How did you decide if a department was relevant to your study? This probably links to how countries were selected. This needs more elaboration and clear explanation.
- REPLY: We have clarified which departments we considered relevant for searching for national primary care guidelines with the text: "To identify relevant documents we searched PubMed, Embase and Google, as well as the websites of relevant national health departments, such as the ministries of health or public health, or centres for disease control." Line 150
- 20. The methods section appears to lack some important details, which are listed in the PRISMA document that the authors completed. More detail is needed on how guidelines were selected from the raw search and finally included in the review. More detail is needed on how data was extracted from the included guidelines. More explanation of how this extracted data was then analysed qualitatively is needed. The results should start with a summary and ideally a flow diagram of how many potential guidelines were in the search, how many excluded any why, how many included at different stages and so on.
- REPLY: We have added these details, as well as a PRISMA diagram. We have further elaborated the methods section beginning at Line 148.
- 21. The results are presented very much as a simple descriptive analysis with a listing of what different countries included in their guidelines using the structure of the framework. I think the analysis would be stronger and more interesting to read if the findings could be synthesized and interpreted more. For example, in your synthesis and interpretation of the data what was well covered, what was not/less covered and what was the range of different approaches to key issues. Findings and methods should also be expressed in the past tense.
- REPLY: Thank you for this suggestion, we have added a table depicting the results to offer a snapshot of the framework elements found in national primary care guidelines. We feel this allows for greater interpretation of our results and easier comparison of national approaches to primary care guidance for COVID-19. Line 221.

We have updated the results text to present results in the past tense.

22. As mentioned previously the discussion would be stronger if it addressed more clearly the central question of the review, and that question(s) was more explicitly stated up front.

REPLY: Based on this, and the above feedback, we have more clearly stated our central aim. Line 127

23. A discussion of how countries with different levels of income and resources, and different strengths of PHC systems, approached their guidelines might also be interesting.

REPLY: We agree that this is an interesting line of thought, however, our aim was not to provide a comparative health systems appraisal of the context in which these guidelines were implemented and given our review is of 14 national guidelines this would become a lengthy comparative discussion. However, we feel that in the discussion section we have effectively compared between elements of national guidelines.

24. In the conclusion and discussion many of the findings seem fairly obvious/common sense and the authors should try and highlight more clearly what new knowledge this review brings to the table.

REPLY: We collected and summarized information from national guidelines which were enacted based on common understanding of how primary care practice can be improved to respond COVID 19, which were indeed based on common sense. This is a finding of our study.

25. [From the PDF comments Line 368] I don't agree with this statement. In many LMICs private providers cater for a small % of the population who can afford them. This reference appears to be about waste gases and so not sure it can support this statement either.

REPLY:Apologies for the incorrect citation, this statement (and the correct citation) was from a previously removed reference to informal private providers. We have removed that sentence as it is not applicable, and amended the text accordingly.

Reviewer 4 Comments:

DEVIEWED

26. Just one minor issue I have lies on Page 5, Lines 90-93. While I agree with the authors to some degree, however, mentioning China's response was expeditious but others were not, may sound controversial without any supporting evidence (and I believe it is not true since other countries are doing their best). I would suggest that the authors should be cautious about mentioning a particular country in this manner (since BMJ has global readership) and, instead, consider removing these sentences.

REPLY: Thank you for raising this issue, given the time that has passed since this draft was written we have seen health systems globally mobilize in similarly rapid ways. The lines have been amended as follows: "Countries worldwide have responded to these demands by rapidly building up dedicated tertiary care facilities and other treatment centres. However, some health systems are not equipped to quickly increase hospital and health workforce capacity" Line 98.

VERSION 2 – REVIEW

Janny Curria

REVIEWER	Jonny Currie
	Public Health Wales
REVIEW RETURNED	03-Nov-2020
GENERAL COMMENTS	This is a valuable summary of guidance for primary care during the COVID-19 pandemic developed by Ministries of Health. It presents a valuable overview of some of the innovation and changes in practice made in response to the challenges encountered by primary care.

In my view the limitations section is far too brief and needs some consideration, given the methodology used by the authors.

Furthermore, some more discussion on to what extent primary care has been included in public health controls around test, trace, isolate and support systems during the pandemic, and to what extent primary care was encouraged to maintain chronic disease management and communicate to the public in order to maintain patients proactively seeking help when becoming unwell, would be valuable, given the widespread (particularly in the UK) debate around primary care integration with public health responses, and data on reduced presentation to health services.

VERSION 2 – AUTHOR RESPONSE

Reviewer 1 Comment: In my view the limitations section is far too brief and needs some consideration, given the methodology used by the authors.

Reply: We have expanded our limitations section to more clearly reflect the limitations of the rapid review methodology we have used (Lines 467 - 469) and to expand upon the impact of time on the review (Lines 474 to 476).

Reviewer 1 Comment: Furthermore, some more discussion on to what extent primary care has been included in public health controls around test, trace, isolate and support systems during the pandemic, and to what extent primary care was encouraged to maintain chronic disease management and communicate to the public in order to maintain patients proactively seeking help when becoming unwell, would be valuable, given the widespread (particularly in the UK) debate around primary care integration with public health responses, and data on reduced presentation to health services. Reply: We thank the reviewer for this valuable feedback – we agree it would be interesting to review how primary care is situated in public health guidance. We have elaborated on the need for strengthened for public health functions in the discussion section (lines 406 – 409 and lines 429 to 431)