Dear Rich Hurley and BMJ editorial team,

We thank you for considering our manuscript *The health and social needs of low-skilled migrant construction workers: who is responsible? (BMJ-2021-065065)* for publication. We are delighted with the positive comments of reviewers and are pleased about the provisional offer of publication, pending on revision addressing the points made by the referees and the editors.

In this response letter we respond to the editors' and reviewers' comments (in red below). Given the instruction of a word limit of 2000 words, we were not able to accommodate all concerns, and have given priority to the issues highlighted by the editor.

Accompanying this letter you will find the Revised manuscript *with* tracked changes and Manuscript (Revised manuscript *without* tracked changes).

We made some minor changes to improve the paper and language used when revising the paper. All changes shown in the Revised manuscript version.

We confirm that there are no updates on our competing interest, contributorship, copyright/license for publication or patient consent form statements.

Please let us know if you have any questions or comments (kristine.onarheim@uib.no).

Sincerely,

The authors

Response to the editor

Please ensure this second paper does not overlap with the first paper 065066 and is distinct. This paper discusses the evidence and examples for how countries could maximize the health now of migrant workers involved in construction for mega sporting events (065066 is concerned with development of the evidence base). The 2 papers can of course refer to each other.

We agree that the message of the paper must be distinct. The background section of paper 2 has been shortened in response to reviewer 3's comment to avoid overlaps, and we have taken considerable care to strengthen the unique value of each paper.

Response to reviewers

Reviewer 1

The reviewer raises the following concerns:

My major concern is that is in its current title and form, it will likely not be effective as a BMJ Analysis paper. To begin, the title includes several new and unfamiliar concepts to readers: low level, migrant labour, construction, mega sports events. I consider these four elements as proving potential misunderstandings for the general medical readership. Given the importance of a title in attracting and bringing a summative or declarative meaning to a piece, we see a serious problem here. .

We thank the reviewer for this comment. We agree that the concepts are new, but suggest to keep the focus and title "The health and social needs of low-skilled migrant construction workers: who is responsible?" of the paper as this is a commissioned article on this specific topic. We agree that "low-skilled migrant construction workers" may be a new concept to some readers, but is described well in the background section of the paper. We have also revisited this in our revisions and feel it is now very clear who we are talking about, with supporting references included if the BMJ's general readership wish to find out more information.

The paper itself does provide some important examples of health inequities, however I fear for impact it would need more background in global health, migrant workers in general, and clear definitions and background on the field of health inequities. This paper currently aligns better with a specialty journal that is able to ensure the audience already has all these complex concepts and definitions clearly established and this would facilitate reader understanding and impact.

We thank you for this comment. The inequities related to low-skilled migrant contruction workers are detailed in the accompanying manuscript 065066 (which includes inequities in the title). We have spent some time explaining these broad concepts in detail in the background section and in the section "The health of migrant construction workers", and argue this paper is suited to a general medical journal. Labour migrants are the largest group of migrants on the move globally and their health needs have been overlooked to date in research terms, so we do strongly feel that a general medical journal such as the BMJ is an excellent platform to share these views and analyse the health and social needs of these migrants in more detail.

I interpret the thesis behind this paper as: there are a group of low paid, and low skilled international construction workers (migrant labour) who may face higher rates of death and disability. Preliminary research suggests serious health inequities and higher mortality, but more research is needed to confirm. The mega sports events appears to provide an opportunity to study health inequities and this could lead to better policies that prevent health inequities.

The challenge is how to communicate these rather complex concepts to a general medical readership. Perhaps a series of papers would be more reasonable to develop the background and understanding of this area.

We thank the reviewer for these comments. Manuscript 065066 presents main research gaps in this area and proposes a research agenda for further study. The reviewer may not be aware that this article is one of two commissioned articles on this topic, where this article (065065) aims to bring attention to who is responsible to address these inequities and the diverse range of stakeholders and sectors that need to be involved.

Reviewer 2

An excellent article.

We thank the reviewer for this positive comment.

While some mass gathering events are considered as a public health priority (see: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30501-X/fulltext) with increasing importance placed on human mobility and health emergent from the event itself, there is little by way of global public health attention to the health vulnerabilities of low waged and low skilled labour migrants that are part of the larger development process of building/maintaing the venues of such mass gathering events.

This is a well written and researched piece and I fully endorse the core actions propised including the need for UN and global health agencies to advocate to relevant member states to ensure health impacts of labour migrants are enshrined and assessed PRIOR to and during the development of such facilities/complexes and indeed during the event itself.

We thank the reviewer for this feedback. We have added the following sentence, including reference to the paper highlighted by Memish et al, 2019.

While mass gathering by some are considered a public health priority,⁷ the health vulnerabilities of low-skilled labour migrants involved in building and maintaining venues prior to and during such events has received little attention.⁶

Reviewer 3

Thank you for the opportunity to review this paper. It is the second in a series focusing on the important need to understand and respond to the health needs of lower-skilled migrant workers engaged in the construction of facilities for global sporting events.

These are welcome and necessary contributions to the field of migration and health, and the development of a research agenda in response to the needs identified.

My main comment/concern links to whether this manuscript is sufficiently different from the first article in the series to justify a standalone piece. The second paper does make additional points relating to the responsibilities for protecting the health of these workers, as well as helpful consideration of whether these global sporting events provide windows of opportunity for drawing attention to the health of migrant workers in this context. Reference to Covid-19 is also welcomed - but this isn't reflected in the conclusion i.e. does Covid-19 also provide a window of opportunity? It would make sense to frame the research recommendations in a way that link to the agenda proposed in paper 1.

We thank the reviewer for these helpful comments. We have worked hard within the writing team to make these papers two stand-alone articles and other reviewers haven't raised this point. We feel now with the changes made during the revisions of both papers that these are two succinct papers. Paper 1 (065066) is an exploration of the evidence base specifically, and paper 2 (this paper) is an exploration more specifically around the policy responses and responsibilities. In paper 2 (this paper), we have shone a specific spotlight on the health and social impact of the COVID-19 pandemic on low-skilled labour migrants, and updated this to include a focus on the COVID-19 vaccination and prioritization of the vaccine to these at-risk groups.

We note the question asked ("who is responsible") is not directly related to "the evidence base" alone. As discussed by in the policy literature (including Kingdon, referred to in the paper), policy making and processes are influenced by other factors such as value judgements and power dimensions. We argue that this is the case for low-skilled labour migrants in the context of mega sporting events in particular. We welcome the suggestion to include covid-19 also as another enabler of policy change. The following sentence has been added in the last section:

The increased vulnerability of COVID-19 infections in low-skilled migrant workers could be an additional factor to open-up for overdue policy changes in terms health and underlying structural risks of this group.

I suggest that the authors of papers 1 and 2 (authored by 5 of the 6 authors on paper 1) combine their contributions, incorporating the novel contributions from paper 2 into paper 1.

Alternatively, the authors could work together to ensure that there is no overlap. For example, paper 2 should remove background and refer to paper 1, and then focus on the new contributions. The role of Covid-19/the Covid-19 context could, perhaps, provide a backdrop to the framing of this piece. e.g. the role of pandemic in interrupting the movement of migrant workers and the impacts thereof - on health and wellbeing in terms of being 'stranded'/unable to return home/unable to work and what this means for health of families left behind.

Many thanks for these suggestions. We have opted for option 2, in light of input from the editor and other reviewers. The background section has been shortened to avoid overlap, and we have specifically added in the following sentence to link article 1 with this article 2:

Building on our article examining the evidence base and research gaps,⁶ this analysis piece explores the health and social conditions of low-skilled labour migrants involved in the construction sector, with a specific focus on recent and upcoming mega sporting events.

Covid-19 is presented in the background (including Box) and is returned to in the discussions around stakeholders. We have expanded the COVID-19 section in light of these comments and those of other reviewers, including a mention of migrants being unable to return home, which is an important point. We have highlighted recent research on the health situation facing children "left behind" in home countries when parents migrate. While the role of the pandemic and its effects on migrant workers is of great interest, it goes beyond the scope of this 2000 words piece but remains an important consideration and a focus of the opening of the article. We strongly feel that with these new revisions to article 1 and 2, we have generated two different articles that each contributes with a new focus.

Reviewer 4

This is an important and topical issue. My main comments are that a lot of the text relates more generally to lowskilled migrant workers rather than specifically for migrant construction workers which is the key population of interest in the document. I would like to see it revised to be better tailored to migrant construction workers and provide more details of their specific situation. While it is equally important to highlight the issues faced by lowskilled migrant workers generally, this article is meant to focus on construction workers.

We appreciate the concern raised on the emphasis on migrant construction workers, the writing group also had multiple discussions on this topic. We aimed, therefore, to write an article that alludes to the broader group of low-skilled labour migrants globally (the larges migrant group at present), but specifically focuses on migrant construction workers This is also what we were commissioned to write the article on, and our 2000 word limit restricts us to some extent. Actually, there is not a great deal of literature on the health and social needs specifically of migrant construction workers, and we have included everything across the two articles. Therefore, it was particularly important to include literature, findings, policy messages about the broader group of low-skilled labour migrants as an important component of these articles. We argue that many of underlying structural and occupational factors that put construction workers at risk, are not specific to construction workers only. Given the scarce literature migrant construction workers specifically, we argue that the general framing is relevant. Yet, we have in the revision of the manuscript aimed to be more specific about when the findings describe low skilled migrant workers more generally and when we focus on construction workers specifically, to address this reviewer's concern.

Below, I highlight some of these areas.

The introduction section introduces the subject matter and sufficiently highlights the need to incorporate migrant construction workers in the context of global mega sporting events.

The health of migrant construction workers

-Much of this section is about low skilled migrant workers in general rather than specifically about migrant construction workers. It would be good to have a more focused discussion on construction workers and how they may differ from the general low skilled migrants. Can the authors highlight data pointing to this area - for example, what was found in the meta analysis that are specific to construction workers. Lines 10 - 17 need further clarification. The authors stated "The temporariness and high-pressure of work related to mega sporting events may put migrant construction workers in social situations with particular risks." What are the "social situations with particular risks"? The two subsequent sentences do not offer much in terms of explanation. It would be better to clarify what safety risk factors specifically rather than just a mention of two specific projects.

Please see initial response below on the focus on low-skilled labour migrants. We have revised the sentences on "social situations with particular risk":

The temporariness and high-pressure of work related to mega sporting events may put migrant construction workers in social and working situations with particular risks. This may include short deadlines, the need to work during unregular working hours or hot seasons due to time pressure or temporary crowded living situations. This includes safety This has been seen in risk factors of construction projects in the Olympics in Beijing and the planned FIFA World Cup in Qatar...

In Box 1, the last sentence that mentions the Qatar World Cup 2022's exemption from restrictions for construction workers. This merits further discussion and elaboration. It is not clear if this means the workers are not being subjected to enforced lockdowns or what restrictions and safety measures the authors are actually referring to that are being exempt, and what the implications may be.

The text has been revised:

Restrictions and safety measures in the workplace to combat COVID-19 have not been adopted equally across sectors. Workers engaged in stadia building projects for the Qatar World Cup were considered critical, and the sector was exempted from lockdown and movement restrictions throughout the pandemic.³⁰ While employers were meant to ensure that sanitisation and social distancing practices were maintained on construction sites, workforce reduction measures were seldom imposed to not jeopardise the tight project delivery deadlines. Qatar was not alone in adopting these measures, with many countries choosing to exempt construction workers from a full lockdown, considering their labour to be essential for ensuring continued critical infrastructure viability.

Investing in the health and social conditions of migrant construction workers -

In relation to the health screening required by many destination countries, I am unclear as to why the authors state that following medical clearance, migrants may still have anxiety around their health. Could the authors please clarify the sentence on lines 52-53: "This may leave even those migrants who pass the health checks with a lingering sense of anxiety around their health."

We agree that the sentence was not clear. The text has been revised and now reads:

Testing positive for e.g. HIV or tuberculosis can mean denied visa applications. In this way, the health status of migrant workers becomes the defining feature of access to working opportunities, also for migrants who pass the health checks prior to arrival. Intense medical vetting of low-skilled labour migrants may not only have limited public health effects, but could contribute to reluctance among migrants in seeking medical attention or alerting employers of ill-health.

The authors stated that countries relying on labour migration "revolve around on the health and wellbeing of migrant construction workers" (lines 3-4). This sentence does not make sense to me. Please clarify.

Thank you for raising this issue. We have clarified the content of the sentence;

Countries and industries reliant on labour migration depend on the health and wellbeing of migrant construction workers.

Can mega sporting events open policy windows?

In relation to past mega sporting events, the 2014 FIFA World Cup in Brazil was mentioned and that it led to improvements on working conditions and collective bargaining. It would be useful to discuss these in some detail - for example, how they came about and whether the changes led to any sustained improvements over time since a number of years have passed. The reforms mentioned in Qatar would also warrant some discussions as to how they came about in order to highlight what roles others (international, national, sectoral actors) can play to support this process. This can link to the next section on responses and responsibilities.

We thank the reviewer of these helpful comments. The paragraph has been revised accordingly:

The 2014 FIFA World Cup in Brazil provided an opportunity for coordinated action between national and international union organizations to improve working conditions and collective bargaining.⁴⁴ Close coordination between Qatar and the ILO to address migrant workers' rights commenced in 2018, and in 2020 resulted in significant labour reforms including workers' rights to change jobs and establishing a non-discriminatory minimum wage. ⁴⁵ ⁴⁶

Responses and responsibilities -

This section would benefit from separating out what needs to be done in the different sectors. On the specific areas for which key stakeholders should be held accountable, it would be useful to specify what they are in more detail.

We thank the reviewer for this suggestion which helps clarify responsibilities. The different stakeholder is shown in *italics* to highlight their role. Table 1 provides detailed information on different areas/sectors each stakeholder should contribute to (health system, social determinants of health, accountability). For none of these areas, one stakeholder is responsible alone and actions by all actors are needed.

"Safe working, social and living environments" are rather vague here. If this were the conclusion it would be fine but in the text there should be more clarity. Additionally, many of the guidelines on labour standards are guidelines and not obligations so countries are not 'obligated' to deliver these unless they are enacted in law. This is the main problem with many of these international standards and guidelines. It would be good if the authors could check these more thoroughly.

We thank the reviewer for raising issues related to labour standards and their implementation and compliance. The paragraph has been revised:

They should be held accountable for providing safe and affordable essential services and public health programs, and in ensuring safe working, social and living environments. This means upholding and adhering to minimum international and national standards in the workplace and in dormitories in preparations for, during and following mega sporting events. While host countries are obligated to do so based on human rights principles, 35 36 they are far from realizing these commitments for labour migrants. The International Labour Organization's (ILO) international labour standards applies to all workers, including migrant workers; such as minimum standards on employment, safety, working conditions, social security and with regards to equality of treatment. 14 47 International labour standards are however guidelines and not obligations unless they are enacted in law at national level. Changes in legislation and financial resources to ensure policy implementation and compliance are key to enable sustainable improvements on working conditions and health rights.⁴⁸ Only then will these last beyond the time-window of mega sporting events, such as for the labour reforms in Qatar. 343

The moving forward section is more like a conclusion rather than a moving forward.

We have suggested a new subtitle "Promoting healthy migration".

Lastly the document does need a thorough read to correct grammar and typos which are in the text, references and table.

Thank you, this has now been done and we would hope that anything we have missed is picked up at sub-editing stage.