Author’s response to reviews

Title: Management of musculoskeletal foot and ankle conditions prior to public-sector orthopaedic referral in South Australia

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Author’s response to reviews:

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Dr Stewart C Morrison
Associate Editor
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Dear Dr Morrison,
We thank you for the opportunity to revise our submission, and for the helpful comments by the reviewers. Please find our responses below.

Best regards,

Tom Walsh

Reviewer #1 has three comments.

1. I'm not sure the phrase 'frequent foot and ankle pain is common' makes sense? Do the authors mean chronic foot and ankle pain?

The term ‘frequent’ refers to pain being present on most days of the week [1], however, to avoid confusion, we have removed ‘frequent’ from the text.

Abstract, paragraph one, line one

Foot and ankle pain is common in the Australian adult population.

Background, paragraph one, line one
Musculoskeletal pain is a leading cause of burden of disease [1]. Foot and ankle pain affects 24% and 15% of adults aged 45 years and older, respectively [2].

2. Comments as above re 'frequent'.

As per our reply to the first comment.

3. The authors have treated the MOXFQ as a measure of foot pain / disability and the EQ-5D as a measure of HRQOL when in fact both instruments are measures of HRQOL.

Thank you for bringing up this point. The MOXFQ is a region-specific measure of the impact of foot-related symptoms on pain, physical function and social interaction experienced by someone. We feel it was appropriate to use tool to summarise foot-related disability. A previous study has found that the MOXFQ is more responsive than EQ-5D in detecting change specific to foot and ankle complaints, particularly with respect to how patients perceive change in pain [2]. Given we expected patients to have some degree of co-morbidity beyond their foot pain, we used the EQ-5D to capture an overall measure of HRQoL that was not region-specific. We have addressed this point in the methods section.

Methods, paragraph six, line two

Foot/ankle pain and disability was assessed using the Manchester-Oxford Foot and Ankle Questionnaire (MOXFQ), which is a patient reported outcome measure that assesses the impact of region-specific dimensions on quality of life.

Methods, paragraph seven, line two

Participants were asked to complete the EuroQoL-5-Dimensions-5-Levels (EQ-5D-5L) to measure overall HRQoL.
Reviewer #2 has four comments.

1. Could you please clarify the definition of responders and non-responders, or those who participated and those who did not? I am confused as to why data from non-responders was included. In the recruitment section you state a returned survey implied consent but in your data analysis section you state "SED were not normally distributed in those that did and did not respond to the survey". Therefore was data included/reported derived from participants who did not respond and therefore did not consent? In the results section titled "study participants" you report results comparing those who participated and non-responders again this emphasises this issue, if they did not participate in the survey they did not consent, therefore should the data be included.

Thank you for bringing up this point. We appreciate that this is a confusing way of reporting participants (responders) vs non-responders. To clarify, we have approval to report the differences between those that completed the questionnaires and thus ‘participated’ with those that didn’t. We have removed the sentence that explains that how consent was obtained to avoid confusion and added the following

Methods, paragraph one, line seven-nine

Basic demographic characteristics (age, gender, socio-economic status) of non-responders was also recorded to determine the presence and potential impact of self-selection bias on the survey results.

2. Just a minor point on flow of the discussion. Currently the discussion details foot pain, then patient expectations and finally management prior to surgery. I would suggest a rearrangement of the discussion to flow with the aims stated in the introduction.

We agree. We have moved paragraph six to paragraph two and feel it now flows concordantly with our background.
3. With regard to foot pain is it possible to elaborate on specific locations of foot pain and the relationship to BMI, being that mannequins were used to detail pain location is higher BMI associated with pain to the forefoot/1st MPJ? Just a question as currently foot pain is described non-specifically.

Whilst we agree this is an important and interesting issue, we feel it is beyond the scope of this study. The difficulty with producing meaningful results with the analysis you have proposed, in this study, is that the participants often had pain in multiple areas and therefore focussing on region-specific pain, without diagnoses, and how they relate to BMI (or any independent variable) may inadvertently misinterpret the relationship.

Other studies [3] have assessed the relationship between regions and diagnoses to variables such as the BMI, but we feel given the nature of data collection in this study and the limited power we may have in some areas make reporting on this difficult to justify, particularly as it doesn’t align with our aims.

4. The sentence "It may also be due to the design of the health system which enables unfettered access to medical practitioners, but a more convoluted and constrained access to AHPs, especially for people without private health insurance and limited disposable income" requires a rewrite. The authors have contextual knowledge of the Australian health system but readers from other countries do not have context. Consideration should be given to explaining this sentence in more detail to demonstrate the barriers or consider deletion.

We agree that this sentence requires more contextualisation for it to be interpreted appropriately by people working in different healthcare systems. We do think it is a useful point to discuss, so have left the topic in the discussion, but we have modified the paragraph. Elaborating further with respect to access to AHPs is not possible as it does vary between states and hospital networks.

Discussion, paragraph 3, line 4-9

In Australia, GPs may feel that surgeons are more capable in managing musculoskeletal foot/ankle pain, and a study found that GPs are significantly more likely to refer patients with
foot/ankle osteoarthritis to an orthopaedic surgeon than to an AHP [15], but it is not known if this is similar for other musculoskeletal foot/ankle conditions. The design of the Australian healthcare system, which is predicated on unfettered access to GPs and publically-funded specialist consultation and intervention, may be responsible for encouraging referral from GPs to surgeons. Whereas the access to publically-funded AHPs is more convoluted and constrained, and there can be substantial heterogeneity in the number and types of consultations and interventions available to patients.

References

