Author’s response to reviews

Title: Integration of a Podiatrist into an orthopaedic department: a cost-consequences analysis

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Author’s response to reviews:

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Mr Daniel Bonanno
Associate Editor
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Dear Mr Bonanno,

Regarding our paper entitled ‘Integration of a Podiatrist into an orthopaedic department: a cost-consequences analysis’

We thank the reviewers for their comments and we provide our responses below.

Best regards,

Tom Walsh
Reviewer 1

1. Reviewer’s comment: Abstract - Under Methods, the "new : review patient ratio" - please remove spaces between words and colon

Response: We have adjusted this sentence, it now reads

‘Data on new and review patient appointments; the number of new patients / session; the number of appointments / patient; the number of patients discharged; the surgical conversion rate; staff time; and imaging use were collected.’

2. Reviewer’s comment: Under Background section - 1st paragraph - the 3rd sentence should be re-worded it is hard to read - suggest removing "or require" - the sentence "suitable discharge plan should be reworded I don't understand who that relates to - the final part of this sentence delete "an operation and expediting these patients to surgeons" and simply say "seeing a surgeon"

Response: Thank you for this comment. We agree the sentence was unclear and we have made the changes you have suggested, it now reads

Background, paragraph 1:

‘The clinics are usually designed to identify patients unlikely to benefit from surgical intervention, and providing a non-surgical management plan. They are also used to detect patients who are likely to benefit from seeing a surgeon.’

3. Reviewer’s comment: There are some commas where they don't need to be, for example: paragraph 2 under Background ",for spinal clinics," only requires one comma. Please review paper and correct these minor issues

Response: We have removed the commas you have highlighted and we have reviewed the paper, removing unnecessary commas where possible

Background, paragraph 2:

‘An evaluation of physiotherapy-led orthopaedic triage for spinal pain found these clinics to be economically favourable [4]’
4. Reviewer’s comment: Last paragraph under Background, the 1st sentence you need to rewrite - put was after therefore
Response: We have adjusted the wording, it now reads

Background, paragraph 3:
‘The aim of this study therefore was to evaluate the cost-consequences of a podiatry-led triage clinic provided in an orthopaedic department relative to usual care to manage patients with non-urgent foot and ankle complaints’

5. Reviewer’s comment: Please include Ethics number under Methods section
Response: We have added the Ethics committee project number

Methods, paragraph 1
‘This study was approved by the Central Adelaide Local Health Network Human Research Ethics Committee, project number Q20160509’

6. Reviewer’s comment: Under Patient triage 1st sentence, was should be were
Response: Thank you for this comment, but we could not find the word ‘was’ in the first sentence. We have removed the word ‘are’ and replaced it was ‘were’.

Methods, paragraph 2
‘Prior to appointments being issued, patients were categorised by a Consultant Orthopaedic Surgeon via paper triage’

7. Reviewer’s comment: Second paragraph under Patient triage section, 2nd sentence - delete "and this also enabled" and replace with "thus enabling"
Response: We have made the requested change
'The clinic was imbedded into existing orthopaedic clinics, utilising clinical nursing and administrative support services concurrently, thus enabling the Podiatrist to consult with other members of the orthopaedic team as needed'

8. Reviewer’s comment: Where you have used colons and semi-colons in this paper (e.g. 2nd paragraph under Patient Triage section, 3rd sentence, use semicolons appropriately

Response: We have made the requested change

‘This approach also limited the additional costs of implementing the clinic, whereby the only costs incurred by the hospital were; (i) the additional administration to schedule patients and; (ii) the Podiatrist’s wages. Medical imaging was included in the economic analysis, although it is not a cost to the provider (hospital), it is a cost to the public health system.’

9. Reviewer’s comment: Is it possible to provide a between group analysis for tables 1 and 2?

   It would be interesting to see whether these findings are significant

Response: Thank you for this comment. Indeed, between group statistical analysis would improve the strength of our paper. We have made the following changes in-text. We have also extensively modified Table 1. We were not, unfortunately, able to undertake a robust statistical analysis for the data in Table 2 given its aggregated nature.

Abstract, paragraph 3:

‘The Podiatrist consulted with more new patients / session, mean (SD) of 3.6 (1.0) versus 0.7 (0.8), p < 0.001 and utilised less appointments / patient than the Orthopaedic Surgeons, mean (SD) of 1.3 (0.6) versus 1.9 (1.1), p < 0.001. The percentage of patients discharged without surgery was similar in the Podiatry Triage Clinic and usual care, 80.3% and 87.5 % p = 0.135, respectively, but the surgical conversion rate was higher in the Podiatry Triage Clinic, 76.1 % versus 12.5 % p < 0.001.’

Methods, paragraph 6:

‘All data were checked for normality prior to inferential statistical analysis. The between group differences in age, number of appointments / patient and the number of new patients / session was analysed with the Mann-Whitney U test. The chi-squared test was used to analyse
differences in gender, surgical conversion rate and the number of patients discharged without surgery.’

Results, paragraph 1:

‘The median (IQR) age of patients in the usual care and triage groups was 56.1 (20.4) years and 57.4 (18.7) years, respectively p = 0.901. There was no significant difference in gender between groups, with the usual care group having 59 / 72 (82.0%) women, while the triage period had 161 / 212 (75.9%) women, p = 0.418.’

Results, paragraph 5:

‘There were no significant differences in the number of patients discharged, without surgical intervention, between the usual care and triage periods. With 63 / 72 (87.5%) patients discharged from the usual care and 139 / 173 (80.3%) patients discharged during the triage period, p = 0.135’

10. Reviewer’s comment: End of paragraph 3 please put brackets around "255  vs 72…"
Response: We have made the requested change

Discussion, paragraph 3:

‘The Podiatrist consulted with a greater number of new, non-urgent foot and ankle complaints compared to the usual care period, (255 versus 72) respectively, and because the clinic was dedicated to non-urgent patients, was able to do so in 36% less sessions’

11. Reviewer’s comment: Paragraph 4, the sentence starting with "Given the lack of…" is a repeat of what you have already said in paragraph 3 so please delete and/or reword
Response: We have reworded this section to avoid repetition

Discussion, paragraph 4:
‘Given the increased cost of a medical specialist’s wage, ensuring that patients see surgeons after they have exhausted non-operative measures will reduce costs and improve flow.’

12. Reviewer’s comment: Paragraph 5 - sentence 2 is long and hard to read - please break up into 2 sentences rather than one - the words outcomes and reported are overused

Response: We have now broken this sentence into two

Discussion, paragraph 5:

‘This economic analysis should be considered in light of some limitations. Firstly, a provider perspective was taken, which looked at appointments and surgical conversion rate, but did not investigate other outcomes such as patient reported outcomes measures. Furthermore, patient-level costs were unavailable and therefore estimates are based on average costs only. Costs beyond the current analysis e.g. additional treatments such as medicines, external appointments and orthoses / braces, and productivity costs are also not included’

13. Reviewer’s comment: At the end of paragraph 5, please add an additional limitation - that you can't be sure that those discharged won't return to the waiting list as you did not evaluate the success or otherwise of conservative treatment

Response: We have added the limitation you have suggested. We have also added another limitation in the same paragraph.

Discussion, paragraph 5:

‘Thirdly, patients were not randomly assigned to usual care or the triage clinic. Therefore, the observed differences could be influenced by other unmeasured variables.’

and

‘Finally, it is unknown if the patients discharged from the waiting list will return to this list in the future.’

14. Reviewer’s comment: Your tables require the headings to stand out from the text so please differentiate these with Bold italics
Response: We have bolded and italicised the table heading

Table 1, 2, 3 – see headings

15. Reviewer’s comment: Reference 9 - is there a DOI or WWW address you can add?

Response: We have added the DOI

Reference list:


Reviewer 2

1. Reviewer’s comment: In terms of any previous studies that have explored orthopaedic triage, have any focussed on cost, apart from reference 4?

Response: With respect to peer-reviewed journal articles, we could only find reference 4 that had analysed the cost-effectiveness of orthopaedic triage roles.

2. Reviewer’s comment: On page 8 of the manuscript (just before the Costs section); of the 12 who declined their orthopaedic appointments, what were the reasons for the declines?

Response: Thank you for this comment, we agree that term ‘declined’ we used is ambiguous. These patients had failed to attend their follow up appointment/s, the reasons for which are unknown. Failing to attend is not uncommon in the public health system, 68 patients failed to attend in the triage period. Accordingly, we have adjusted this sentence

Results, paragraph 4:

‘Of the remaining patients, 12 are under review, 14 remain to be seen and 12 failed to attend their appointment with a Consultant Orthopaedic Surgeon.’
3. Reviewer’s comment: Was the timeline for appointments recorded? I appreciate this does not correlate with the aim of the study, but timelines to appointments and outcomes of patients are also important. Can the authors supply this information?

Response: Given the nature and aim of the study, providing accurate, robust data on the time taken from the initial referral to the initial appointment is not possible. It is, as you rightly point out, important but we feel it is probably more important when assessing patient reported outcomes measures, as waiting time could confound the perceived outcome. These data will be collected in future studies assessing outcomes and we thank you for this suggestion. We have added a line to advise the reader on the general length of time patients waited.

Methods, paragraph 1:

‘The majority of patients seen in the usual care and the triage periods had waited between 12 - 24 months for their initial appointment, but some had waited greater than 24 months.’

4. Reviewer’s comment: On the second page of the discussion section, lines 9 - 14, the sentence could be worded a little better for understanding and clarity. What types of conditions were referred for the orthopaedic and podiatric triage? I appreciate this request seems basic, but there is likely to be differences, from district to district, region to region and country to country.

Response: We have added the common conditions seen as non-urgent foot and ankle conditions. We have reworded the sentence between lines 9-14 in paragraph 3 of the discussion to improve clarity.

Methods, paragraph 2:

‘The common conditions seen as non-urgent are hallux valgus, hallux rigidus, hammertoes, Morton’s neuroma, plantar fasciopathy, midfoot osteoarthritis, Achilles tendinopathy and plantar plate pathology.’

Discussion, paragraph 3:

‘Orthopaedic Surgeons spend less than 30% of their time consulting in Australian public hospitals, if hospitals are to ensure that a surgeons’ limited time is appropriately utilised, then
processes should be developed to ensure that the patients that are seen do require a surgical opinion.’

5. Reviewer’s comment: The time effectiveness would be an important addition in the discussion and can be linked with the cost analysis, since time is money. The conclusion is appropriate and contains the relevant information, but again, adding the timeline for appointment times would be useful.

Response: The usual care and triage periods allowed 30 minutes for a new patient and 15 minutes for a review patient. The aggregated cost, however, provided for the ‘usual care’ period meant that new and review patient appointments were given the same weighting. To adjust accordingly, the triage clinic considered the new and review appointments as 30 minutes, which allows for a like-for-like comparison. Interestingly, the results may slightly underestimate the cost-effectiveness of the triage clinic given this adjustment, but we thought it was best to be conservative in our analysis.

We have added the following line to provide the readers with some context regarding appointment times

Methods, paragraph 1:

‘New and review patient appointments were given 30 minutes and 15 minutes, respectively during both periods.’