Reviewer’s report

Title: Diabetic Foot Australia guideline on footwear for people with diabetes

Version: 0 Date: 25 Sep 2017

Reviewer: Vanessa Nube

Reviewer’s report:

I respect the tremendous depth of knowledge held by the authors in this field. But in particular, has published important original research in this field as well as well as being the main author on the IWGDF guidance. The IWGDF guidance documents provide very clear and freely accessible information on this topic. However, for this current article to be a useful Australian guideline and meet its "...hope to ensure that all Australians with diabetes are provided with appropriate footwear" and "reduce the national burden of diabetic foot disease" I believe the authors need to;

1) Identify and summarise any new information which we need to translate into practice from research conducted since the time of last publication (2013, they refer to) and

2) Contextualise the content from International guidelines and research for the Australian audience

The article's key recommendations while valid, are fairly traditional and would be familiar to the readers.

Please consider including in the recommendations, that patients "wear-in" new footwear gradually. This is frequently given (and safe) advice from experienced clinicians and providers. In my view, this is at least as important as the recommendation provided that patients wear socks with footwear (as stated by the authors).

I agree there is stronger evidence with regards to ulcer prevention when there is adherence to wearing of custom, medical grade footwear (23). However, Australia has few appropriately trained custom shoemakers (one of the Authors being one) and Australia does not have a National, universally available public funding scheme to support the provision of footwear for people with diabetes who need them. The majority of medical-grade footwear provided in Australia to patients with diabetic foot complications and deformity is off-the-shelf +/- modifications and relatively fewer patients are prescribed custom-made footwear. I don't know if the authors agree with this or not but I believe that this should be addressed in the article and some guidance with regards to custom versus off-the-shelf footwear provided.

In marrying recommendations to the NHMRC endorsed risk stratification, the point of difference between the different recommendations for people (at risk) with deformity and (at risk ) without foot deformity becomes somewhat lost. How to determine who needs regular, medical-grade or Custom Medical Grade should be clearer. This new version does not differ from the original 2013 guidance in this key recommendation but it is harder to find the recommendation in the
2017 text. This 2017 version states on line 207 "When a foot deformity or pre-ulcerative lesion is present, consider prescribing medical grade footwear which may include custom-made in-shoe orthoses or insoles."

The 2013 article says the same in a table.


Line 221 - Check reference for this statement.

The article could be shorter and more concise. Consider placing some of the rationale and discussion about the process and structure elsewhere and not in the main body of the article. This will assist readers to access the information they need. Consider tabulating the key recommendations.

Line 242-3 - Guidance on how to address suitable footwear for indoors would be useful given knowledge that many patients often don't wear their prescribed footwear in their home (30,40)

Line 259 - Consider that medical grade footwear may be required to accommodate deformities which cause dorsal foot wounds (eg. Clawed toes) and not just plantar ulcers (as stated).

The inclusion of contemporary data from Arts (25) in Table 4 is not highly applicable. It relates to a study where changes made to existing custom-made footwear when areas of > 200kPa were identified using in-shoe pressure measurement. It actually raises more questions. I am not critiquing the original article but questioning the value of providing this table, out of context, within this article. Ie.

"Replacement of top cover"  - Replacement from what material to which new material?

"Addition of medial arch support" What material, height etc?

"Adjustment of pivot" To where? Etc…

Table 3 from a 2001 article is derived from considerably older reference material on footwear design from the 80's and 90's. Again, I am not critiquing the original article but ask the authors to re-consider the value of this table in the context of this current article. To whom is this information being targeted?

In my opinion a detailed algorithm which distils the evidence and expert consensus requires a separate, detailed publication. The current version does not adequately address prescription of orthoses and footwear if this is its intent. Such an article would be highly valuable.

There is some nice discussion regarding the patient perspective and behaviour change at the end which is not covered in the 2013 version and this helps lead us to a more patient-centred approach.
**Level of interest**
Please indicate how interesting you found the manuscript:

An article of limited interest

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.