Reviewer's report

**Title:** Hallux Valgus and Plantar Pressure Loading: A Population of Men and Women

**Version:** 1  **Date:** 16 July 2013

**Reviewer:** Edward Roddy

**Reviewer's report:**

This is a well-written manuscript which describes foot loading patterns and pressure profiles associated with hallux valgus. This is an under-researched area and this manuscript will make a clear contribution to the literature. The methods appear sound. There are two potentially contentious aspects of the methods but these appear to have been dealt with satisfactorily: (1) the unit of analysis is the foot rather than the person (6393 feet from 3205 persons) - however, generalised estimating equations were used in the linear regression model to account for lack of independence between two feet in one person; (2) plantar pressure variables were obtained from a single walking trial rather than multiple trials - the potential for this approach to increase measurement error is appropriately acknowledged in the discussion section.

**Major Compulsory Revisions**

1) Background (pg 3) - hallux valgus is described as a structural deformity commonly referred to as a bunion. A bunion is more accurately described as the reactive soft tissue changes that occurs secondary to the increased prominence of the 1st MTP joint laterally as a consequence of the hallux valgus deformity.

2) Methods (pg 4) - hallux valgus was defined by a greater than 15 degree abuction of the hallux by comparison to an illustration of the hallux valgus angle. A more detailed description of this technique is required. What is the validity and reliability of this method?

3) Methods (pg 4) - how was hallux rigidus measured?

**Minor Essential Revisions**

1) Reference 19 is incomplete

2) Figure 3 is described as a CONSORT diagram. The CONSORT statement pertains to the reporting of randomised controlled trials. The figure should be renamed

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests