Reviewer's report

Title: Quality of family history collection with use of a patient facing family history collection tool.

Version: 1 Date: 19 December 2013

Reviewer: Rodolfo Valdez

Reviewer's report:

Summary:

In this manuscript the authors use, but do not describe, a web-based tool (MeTree) to collect detailed family history of 48 diseases. The tool is also capable of providing risk stratification for 5 of these conditions. The manuscript evaluates the quality of the family histories collected with the tool and compares this quality with the quality of family histories collected through chart review. The results confirm the ability of MeTree to collect high-quality family histories according to 8 objective criteria.

Compulsory revisions:

1. Describe, briefly in the introduction, the family history tool used. What is MeTree?

2. The main objective of this manuscript is to assess the quality of the pedigrees collected with MeTree. The authors list 8 criteria to define this quality. However, the use of these criteria throughout the manuscript varies and it is hard for the reader to follow the variations. For example, the abstract (page 3) lists 8 criteria; the same criteria are listed in the methodology (pages 6-7) but they are immediately reduced to 5 criteria (page 7) for pedigrees with no deceased relatives. On page 8 the authors state that when a relative was affected by two or more conditions, the quality of reporting will be evaluated for just one of the conditions. On page 11, the authors talk about high-quality relatives and how their numbers affect the quality of the family history collected. It would be better if the authors address all the quality related issues in just one section of the manuscript or a table.

Minor essential revisions

1. Indicate the response rate: 1,184 patients entered their FHH; how many were invited?

2. Given the constant change of denominators, the authors should report both numerator and denominators in the percentages, particularly for those not reported in the tables. They do it in a few cases but should do it consistently for all cases.
3. Tables and figures should be self-contained; i.e., title and footnotes should be comprehensive and the reader should not need to go to the text to interpret the results (include the meaning of abbreviations and concepts in titles and footnotes; for example, what ‘baseline’ means in table 2?). Also, be consistent with the numbers reported. Table 1 reports N and % in one column but not in the other. According to the authors, figure 2 reports percentages (range 0–100) but the figure actually reports proportions (range 0–1).

4. In two places (pages 8 and 15) the authors state that their population is generalizable. Generalizable are the findings not the sample of a population. By the way, the sentence regarding generalization on page 15 repeats ‘that’ unnecessarily.

5. Probably the reference number 31 on page 14, regarding risk stratification, should be changed to 32.

6. A sentence on page 16 states that some probands may not know the FHH history of a grandparent. I believe that what the authors mean is the ‘disease status’ or ‘vital status’ of a grandparent, not the family history.

Discretionary revision

1. The axis in figure 1 would look better if they were not detached from the histogram.

**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:**

declare that I have no competing interests’ below. If your reply is yes to any, please give details below.