Reviewer's report

**Title:** An overview of the value of functional data analysis (FDA) with a particular focus on public health and biomedical applications

**Version:** 1  **Date:** 13 August 2012

**Reviewer:** YUKUN WU

**Reviewer's report:**

The authors did some literature search on the application of functional data analysis (FDA) in the field of health sciences. It is not easy to cover every aspect of FDA in depth. For example, smoothing methods can be a paper by itself. Some comments follow:

1). The authors seemed to submit the article without careful proofreading. There are some obvious language problems:
   Line 5 of paragraph 1 on page 6, "... peocesses, [l]and usage ...";
   Line 4 of paragraph 2 on page 6, "issues [has] have also ...";
   First sentence of paragraph 3 on page 18 (section discussion) is grammatically incorrect;
   Line 2 on page 19, "... algorithms [an] can even ...";
   Sentence 2 of paragraph 2 on page 12, "A common approach ..." is ambiguous;
   The conclusion part in abstract needs to be carefully rewritten. It does not answer the question of the title (value) at all.

2). Due to its non-parametric assumption, a drawback of FDA is its ability of forecasting and corresponding interpretation, especially in a health data setting. Can the authors discuss it more?

3). It is doubtful that the authors could conclude FDA as a preferred modeling approach for time series data (page 21, paragraph 1 of section "conclusion") based only on the searched articles.

4). The title looks not relevant to the contents, or vice versa.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**
I declare that I have no competing interests