Reviewer's report

Title: Modeling delay to diagnosis for Amiotrophic lateral sclerosis: under reporting and incidence estimates

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Reviewer: JESSICA MANDRIOLI

Reviewer's report:

The paper aims at providing a reliable estimate of ALS incidence rate based on data from the NRRD and on an estimator for the distribution of delay to diagnosis.

The authors propose to adopt an Horvitz-Thompson based estimator to correct the incidence figure that can be derived for the period 2007-2009 from the NRRD, Italy.

The paper is very rich in details about the methods but I suggest to better explain which would be the advantages of such a method compared with a national register for ALS, aimed at the epidemiological findings that the NRRD can only roughly estimate.

Also the assumption that delay to diagnosis is related to underreporting should be better explained and demonstrated (it is possible that cases underreported are cases with very fast disease course, early death, and conversely short diagnostic delay)

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests