Reviewer's report

Title: Predictors of receiving therapy among very low birth weight 2-year olds eligible for Part C early intervention in Wisconsin

Version: 2 Date: 27 January 2013

Reviewer: Jean Lowe

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Review of Manuscript for ‘Unmet need for therapy’

Major revisions:

1. Is the question posed original, important and well defined?
   The research question is an important one and has been addressed before but in different ways. The author is trying to make a point that ‘socially disadvantaged neighborhoods’ increases the risk of a child not getting adequate therapy. I felt I learned that the barrier to therapy was more being from a ‘disadvantaged neighborhood’ and in fact having Medicaid was an asset. There however were some contradictory statements that made part of the manuscript confusing and also some inferences that I do not believe can be made from the data presented.

2. Are the data sound and well controlled?
   The data is well described and the methods provides a nice description of attrition in # and why that occurred. Though the study is limited to Black and White children a good case was made to eliminate other minority groups with too small numbers.

3. Is the interpretation (discussion and conclusion) well balanced and supported by the data?
   There were a number of issues in the discussion that were not clear.
   Paragraph 1 – Page 14…‘…20% were receiving no therapy services, suggesting a high level of unmet need for services.’ This is an inference as a child may qualify for early intervention and the specific need of therapy is still unclear. The authors do not know why therapy was not provided and what did comprise early intervention – for example the child may have needed a developmentalist providing overall intervention rather than specific OT or PT or SLP. ‘ The results also indicated that the children with ‘concomitant disability are getting more therapy maybe indicating those children needing therapy did get it?’

   Page 15- last two sentences of the first paragraph beginning with… ‘However, we acknowledge that the association…’ I am not sure the intent of this sentence or the associations they are addressing.

   Page 16 discusses a Post hoc analyses not shown. This analysis should be included in the results as it appears to strength the findings.
Page 18

Conclusions – I am not sure we can ‘ameliorate’ disability. I would soften this statement.

4. Are the methods appropriate and well described, and are sufficient details provided to allow others to evaluate and/or replicate the work?

The methods is well described. The method used to get the Neighborhood Disadvantage score was quite complex and may be difficult to replicate. It was not clear if it would have be established differently for all neighborhoods or if it could be generalized.

The other variables and statistical analysis is well defined.

Results – The last 2 sentences of the 2nd paragraph were unclear and needs to be re-written in a clearer and more readable manner.

5. What are the strengths and weaknesses of the methods?

The strength of the design uses Medicaid and insurance as well as income and maternal education as factors that are easily obtained.

The complex manner that the social disadvantage score was obtained makes it hard to replicate.

The SNAP score that was used for neonatal acuity is often difficult to get. Others measure may have been considered such as need for ventilation, days of hospitalization that are more readily available than finding the ph level and urine output in the first days of life. This however is a well validated tool and used in other studies.

As the authors indicated using parent report for therapy is limiting and does not indicate the intensity or frequency of therapy. Consistency in referring to therapy in this way is important – ‘parent reported therapy’

ABSTRACT – use of ‘receipt’ was awkward for me and I have not frequently seen this term used? Consider another term.

The term ‘socially disadvantaged neighborhood’ is not defined and a mention of what that is would be helpful.

INTRODUCTION: 2nd 2nd paragraph ‘From a method logic standpoint flexible EI service delivery models..’ I did get the point but it took me several times reading the sentence to understand. Maybe make it a bit clearer.

When talking about ‘unmet need of therapy’ – this is an inference in this paper as this was not assessed.. lack of having therapy does not directly correlate with needing it. I would focus on those who got therapy and why rather than the 20% who did not.

End of page 5 of introduction – refers to therapy services improving cognitive and motor skills. This is highly controversial, and I would soften this statement and find more recent references. There are as many articles saying therapy shows no change as those inferring change.
6. Can the writing, organization, tables and figures be improved?
   Tables – are fine

7. When revisions are requested.

   I feel there are several revisions needed prior to publications. The information is important and relevant but I think the authors should stick to their findings. which are Medicaid is an asset to getting therapy and social disadvantaged neighborhood is not. I think it is not valid to discuss that those who did not get therapy needed it. In fact it appears that more kids getting therapy had combined disability and those who did not get therapy had less of the combined disability.

   Specifics above were provided how to clarify the various sections of the paper.

   Hope this is helpful to you and the authors.
   Respectfully
   Jean Lowe

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I have no competing interests to this study in any way.