Reviewer’s report

Title: Using flawed, uncertain, proximate and sparse (FUPS) data in the context of complexity: learning from the case of child mental health

Version: 1 Date: 02 Apr 2018

Reviewer: Kelly Kelleher

Reviewer's report:

This manuscript presents a definition of FUPS-ness, a case study of addressing it, and some brief recommendations for others considering real world problems in complex systems and their assessment. In total, it is mostly engaging, useful and practical for those in certain situations. It addresses problems in a practical voice with sufficient details about the case study to provide the reader guidance on issues.

Several other strengths are noted. The authors demonstrate excellent understanding of the complex child mental health system, their case study. They clearly have engaged with various parties over prolonged periods and learned a great deal from them. The figure at the end of the manuscript is useful as a simple way to present the functioning of a challenging care system and provide actionable steps.

A few minor changes would strengthen the manuscript. First, the authors hint that FUPS-ness is new or innovative without reference to the extensive literature on analyzing these various types of errors/flaws in data. There are many analytical and graphical approaches to each of the types of data flaws that the authors describe (eg uncertainty) that have been documented elsewhere and should likely be referenced or acknowledged. It is useful in this case to have them summarized and approached from a practical perspective which is the main contribution of this paper.

Secondly, the authors would be well served to talk about the longitudinality of the relationships and the roles of the various parties over time in their interaction rather than the point in time review of data. Such interactions with complex systems take long periods to develop as they hint at in their one table.

The principal content objection is the inference that prevention in child mental health does not work. There are now more than 300 randomized trials of preventive interventions for child mental health demonstrating marked reductions in emotional and behavioral disorders. It is true that prevention is rarely paid or reimbursed in treatment oriented medical systems, but it is incorrect to say it is ineffective.
Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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