Author's response to reviews

Title: Compliance with Referrals for Non-acute Child Health Conditions: Evidence from the Longitudinal ASENZE Study in KwaZulu Natal, South Africa

Authors:

Omolara T Uwemedimo (omolara.thomas@gmail.com)
Stephen M Arpadi (sma2@columbia.edu)
Meera K Chhagan (chhaganmeera@gmail.com)
Shuaib Kauchali (kauchalis@gmail.com)
Murray H Craib (asenze.director@gmail.com)
Fatimatou Bah (fb2201@columbia.edu)
Leslie L Davidson (lld1@columbia.edu)

Version: 8 Date: 19 February 2014

Author's response to reviews: see over
We are pleased to re-submit the revised manuscript entitled “Compliance with Referrals for Child Health Services: Evidence from the Longitudinal ASENZE Study in KwaZulu Natal, South Africa” for consideration for publication in *BMC Health Services Research*. We have included a point by point response to the comments posed by each reviewer on the following pages.

In this paper, we report the relationship between compliance with referrals to child health services for sub-acute, chronic conditions and socio-demographic factors within the ASENZE study, a longitudinal study conducted in KwaZulu Natal, South Africa.

Within sub-Saharan Africa, there has been a notable increase in the burden of chronic conditions among pediatric populations. An effective referral system is an integral component to ensuring improved health outcomes for these conditions. While many studies have evaluated factors associated with referral compliance for acute, life threatening conditions affecting young children in sub-Saharan Africa, no studies, to our knowledge, have evaluated referral compliance for sub-acute chronic conditions in this population. This is of great importance, since management of chronic conditions is heavily reliant on well-functioning referral systems that allow a child to move from screening to treatment with ease, thereby resulting in improved quality of care, decreased healthcare expenditures and most importantly, better health outcomes. In this study, referral compliance was high for HIV infection and anemia, but lower for vision problems, hearing or ear problems, anemia and developmental delay. Additionally, referral compliance was significantly associated with specific socio-demographic factors such as younger caregiver age, higher household educational attainment and stable caregiving.

The *BMC Health Services Research* audience will benefit greatly from these findings and may be able to integrate this information to support further research investigating other potential determinants of compliance with child health services, such as caregiver knowledge and attitudes about the health system and infrastructure of the health system. This study may also highlight possible at-risk groups for poor compliance with referrals in disadvantaged African communities, although further research is needed to explore these relationships.

The contents of this research are the sole responsibility of the authors and do not represent the official views of the funding agency. This research study was approved by the Columbia University Medical Center Institutional Review Board and the Biomedical Research Ethics Committee of University of KwaZulu-Natal, Durban, South Africa. Each of the authors has contributed to development of the concept/design, data analysis, interpretation of data, drafting and/or revising this manuscript. Additionally, all authors have reviewed and approved the manuscript as submitted. The authors have no conflicts of interest or financial disclosures. This manuscript has not been published nor is being considered for publication elsewhere.

Thank you for your time and consideration. Please contact me by telephone (516-465-4377) or electronic mail (ouwemedimo@nshs.edu) if you have any questions.

Sincerely,

Omolaru Thomas Uwemedimo, MD, MPH
Assistant Professor of Pediatrics and Population Health
Division of General Pediatrics and Population Health, Hofstra North Shore-LIJ School of Medicine
Responses to reviewer comments
Reviewer 2 (Simba)
Major Compulsory Revision

The authors understand the reviewer’s concern of not including caregiver knowledge into the final logistic regression model. For this reason, the authors have removed the logistic regression analysis from the entire paper and will perform this analysis once data collection on this variable and other major confounders are complete for submission in a subsequent manuscript. Instead, we have only included our findings from our bivariate analyses and have appropriately included the lack of regression analysis as a limitation to the present study in the conclusion section (pg 14, lines 20-23).