Reviewer’s report

Title: Effectiveness of Short Message Services Reminder on Childhood Immunization Programme in Kadoma, Zimbabwe - A Randomized Control Trial, 2013

Version: 6 Date: 7 October 2014

Reviewer: patrick Cashman

Reviewer’s report:

Reviewers report for Bangure et al.

Overall a clearly written report of an interesting study which adds useful information for people conducting immunization programs. The outline of sms costings most welcome.

Major compulsory Revisions
In the Abstract line 57 & 58 is missing the word ‘NOT’
Currently reads
‘Those who delayed receiving immunization at 14 weeks were 82% for the intervention and 8% for non-intervention group.’

In the paper this data is presented in Results at lines 225 – 227 as
‘The proportion of those who did NOT delay in receiving OPV3, Penta3 and PCV3 at 14 weeks was 81% in the intervention group and 8% in the non intervention group.’

Please correct and clarify if 81% or 82% not delayed.

Minor Essential Revisions
Final paragraph of Background line 145 requires a space inserted for ‘inorder’

Discretionary Revisions
• In Background 3rd paragraph line 98 mentions the penetration of mobile phones, is there data available on mobile phone ownership or usage either locally or countrywide?
• In Results line 188 only one mother was excluded because did not have a cell phone. Cell phone ownership and impact on sms strategy would be worth a comment in the discussion. Comment if you think this is representative or if there are known sub populations in your area or in Zimbabwe without cell phones who would require a different strategy.
• In Table 1, 15% mothers have Farm/Mine or Rural as place of residence. Please comment on cell phone coverage/reception and if any disadvantage for the non-urban population of a sms reminder system for your study.
• In Background line 141 - 143 the newly strengthened health promotion officers are introduced. Their work is part of both arms of your study. Please describe what form the health education for immunization timeliness takes – written material or face to face discussions? Also in Methods line 166 to 169 both arms of the study have the ‘routine health education’. Please describe and is it standardized so that everyone receives the same education

• In Results please define the terms – ‘Immunization Coverage’ at what point? At what age is the cut off? Please define the ‘Delay in Immunization Appointment’ what period after the due date is considered a delay? The ‘Age of Child Immunized’ is helpful as this describes age in days. Seems improbable that 96% of intervention infants were immunized at 41 and 42 days of age. Do the clinics operate 7 days a week? Are the clinics very easy to access? Some explanation of supporting infrastructure either in background or discussion required to explain this incredible figure. If the age of 41 and 42 days is the definition of the timing of ‘Coverage’ and ‘Delay’ date then change the order of these three sections and present the age of immunization first.

• In Discussion in line 357 the Authors claim that their findings are similar to Balogun et al. But the Authors found a local language preferred whereas the Nigerian work found English preferred to a local language. Seems these are different findings?

• A translated transcript of the sms used in the study would add to the paper.

• In Methods no mention if the 304 Mothers were aware of their study allocation – were sms mothers more likely to immunize on time to please the researchers? This could alternatively be dealt with in Discussion.

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests