

Terms of Reference:

Individual or team to conduct assessment of Ebola contact tracing mHealth application

A team of researchers from the London School of Hygiene & Tropical Medicine and Innovations for Poverty Action Sierra Leone developed a study evaluating the use of mobile technology in improving the process of tracing contacts of Ebola patients in Sierra Leone. As part of this study, the team, with the help of a developer, designed a customized application using Dimagi's CommCare that has been implemented in the district of Port Loko.

In summary, the application allows data on Ebola cases and their contacts entered at the district headquarters to be sent electronically to mobile phones held by contact tracing coordinators in various chiefdoms. Coordinators then assign contacts to tracers to be monitoring for a period of 21 days also using the mobile app. In the event Ebola-like symptoms are logged, an alert is sent to a district-level response team.

The research team seeks an individual or small group of mHealth experts to conduct an assessment of the design of the custom-built CommCare application used for contact tracing in Sierra Leone's Port Loko district. The review should include, but may not be limited to, the following components:

- Appropriateness
 - o How well does the app fit the intended needs?
 - o How well has the app managed to accomplish its intended aims with minimal adjustments to existing reporting structure and policies?
 - o How flexible has the app been in accommodating changes to contact tracing protocols?
- Functionality
 - o In what ways has the app improved reporting and information transfer?
 - o What have been the challenges of using the app and mobile phones for users?
- Usability at all stages
 - o How well does the app fit the needs of users of the app for data entry?
 - o How well does the app fit the needs of end users of information from the app?
- Security
 - o Has the app ensured secure data transfer at least at existing standards?
 - o Has the app improved data security?
- Recommendations on further uses of the app in Port Loko district
- Any other criteria deemed appropriate by the research team and/or consultant(s)

The research team will support a week-long field visit to investigate the on-the-ground use of the app and interact with end users. After a review of key documents, largely qualitative methods are expected to be used, including interviews with users at all levels, ideally with comparisons to user experiences of the existing paper-based system:

- District Health Management Team (data entry into the app and also end users of the data)
- Contact Tracing Coordinators (users of the app to assign contacts to tracers and end users of status of work of tracers)

- Contact Tracers (users of app to survey contacts for 21 days after receiving contact details)
- Alerts team (recipients of alerts generated by symptomatic contacts)
- Potential interviews with policy stakeholders and implementing partners

The assessment is expected to be conducted for a period of 25 days, to be completed by September 10th. Expected outputs include a report that will inform publications by the research team on the effectiveness of the application in achieving its intended aims of improving the speed and quality of information transfer in the contact tracing process.

Interested individuals or teams should submit a 2-3 page proposed methodology, timeline, budget (including daily consultancy rates), and relevant experience with CV(s) attached to **nadia.hasham@lshtm.ac.uk** by **August 14, 2015**.