Mitigating the challenges of introducing an mHealth solution in rural Mozambique by using a community dialogue approach

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KEY MESSAGES

- To capitalise on the invaluable opportunities for accelerating development outcomes that the increased usage of mobile technologies and services in sub-Saharan Africa offer, interventions should be accompanied by robust community engagement strategies.
- A community dialogue approach (CDA) successfully and pre-emptively addressed the socio-cultural norms and allayed fears around data collection and use that may otherwise have limited community acceptance and uptake of new mHealth tools in remote and underserved villages in Mozambique.

Background

As access to and use of mobile technology has increased in Mozambique over the last decade (from eight percent in 2007 to 66 percent in 2016),[1] invaluable opportunities for accelerating development outcomes have arisen.

Cognisant of this trend, since 2016 Malaria Consortium developed and rolled out a mHealth platform called upSCALE that aimed to improve the quality, coverage and management of the Mozambican Ministry of Health's community health workers (CHW) programme. The platform comprises: a smartphone app that guides CHWs through diagnosis, treatment and referral; and a tablet-based application that allows supervisors to monitor CHWs' case management, stock management and performance, and to provide CHWs with tailored technical support.

CHW facilitating a CD in Macomia district, Cabo Delgado province, Mozambique

Programme intervention

Intervention

- *Community dialogues (CDs):* knowing that the use of smartphones and access to the internet is often extremely limited in rural Mozambique, the project sought to overcome related knowledge/capacity gaps and socio-cultural barriers to community acceptance of CHWs using mobile devices during consultations by holding CDs that were led autonomously by a group of volunteers from existing local community health committees (CHCs) and that promoted digital tools for collecting health data. Figure 1 shows the three core processes that occurred during CDs.
    - In Mozambique, CHCs are the lowest structure via which communities can participate in health programmes. They are composed of community volunteers, who are typically local leaders, teachers, traditional medicine practitioners and birth attendants, representatives from women's' groups, and CHWs.
- *Training:* before leading CDs, 613 volunteers from 257 CHCs attended two-day workshops on how to organise and run participatory CDs using visual tools and a 10-step methodology (from preparation to action planning). The latter included key facts and messages about the smartphone app.
- *Reporting:* volunteers were also asked to submit event reports to the District Health Service after running a CD. Sixty-eight (27 percent) of CHCs submitted such reports, and others explained they had not done so due to a lack of transportation (30 percent), insufficient numbers of summary sheets (15 percent), and their communities' preoccupation with farmwork (15 percent). Thirteen percent did not provide a reason.

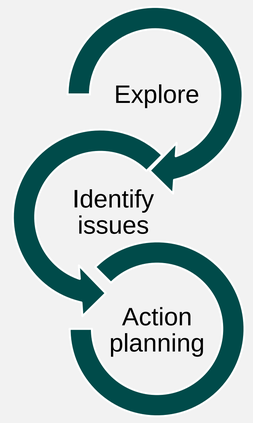

Figure 1: The key stages of CDs

Method of analysis

- Semi-structured telephone interviews were carried out with the volunteers who had submitted reports and responses were explored for their perspectives. The interviews took place three to six months post-training and lines of inquiry covered: community members' acceptance of and participation in CDs, decisions and/or consensuses reached during CDs, the extent to which decisions were effectively implemented, and any impact these might have had.

Results

The interviews identified that CDs:

- developed participants' understanding of the importance of the mHealth tools and the benefits these would confer to community members
- increased patients' trust in CHWs' services
- fostered appreciation of the mHealth tool among CHWs
- alleviated community members' fears around the how their personal data would be used and why it was being collected
- reduced the loss and damage of mHealth equipment and increased community support in resolving hardware theft.

" I have seen that my community is now more informed; with the introduction DCs they know the benefits of using the upSCALE app… It is normal now that they go to the APE (CHW) and ask that the smartphone is used during their consultation, but this was once a problem… The DC facilitated community ownership of the APE's equipment and community involvement in supporting its usage – for example, community members agreed for smartphones to be recharged in their households if needed." (Community leader, Quissanga, Cabo Delgado)

CHW registering a household, Cabo Delgado province, Mozambique

Conclusions

A participatory, CDA successfully generated community consensus around the ownership and uptake of an mHealth platform in rural Mozambique.

Lessons learnt

- The CDA is an appropriate method for addressing the socio-cultural barriers that may otherwise limit acceptance of new mHealth tools.
- Such community sensitisation should take place before mHealth tools are rolled out, as this enables misconceptions (particularly around the invasion of privacy) to be dispelled and for uptake to be fostered.

Bibliography

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Further reading

- Malaria Consortium. Community dialogues and mobile health: Insights from Mozambique. London: Malaria Consortium; 2018. Available from: http://bit.ly/insightASBC.

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