



Volunteer Malaria Testers

► Introduction

To bring malaria services to the hard-to-reach mining communities in Guyana's hinterlands, the Ministry of Health (MOH) and the Pan-American Health Organization (PAHO) instituted a malaria community case management program in which stable workers in mining camps and communities are trained to test and treat uncomplicated cases of malaria. Formative research conducted by Breakthrough ACTION Guyana revealed that, despite the availability of these services, many miners did not know they existed. To address this challenge, the project supported the MOH to develop a package of social and behavior change (SBC) interventions to increase the visibility of the volunteer malaria testers (VMTs), equip them with the necessary tools to counsel clients effectively, and recognize the VMTs for their efforts to improve retention.



► Intervention

Testers underwent training led by the MOH in which they learned how to perform malaria rapid diagnostic tests (RDTs), interpret the results, administer treatment, and complete the necessary reporting forms. In later iterations of the training, Breakthrough ACTION conducted an SBC session as part of the training, during which facilitators oriented VMTs on malaria SBC tools. Testers who successfully completed the training received the following package of branded materials to bring visibility and credibility to and improve the quality of their services:

“Free Malaria Testing and Treatment” signs. Printed in English on one side and Spanish or Portuguese on the other, these signs were placed in front of shops, mining camps, and other testing sites to identify MOH-approved testing locations and emphasize that services were free.

Tester’s toolkit. This easily portable waterproof box, branded with the “Lil Mosquito, Big Problem” (LMBP) campaign logo, served as a place to store all of the VMTs’ malaria testing and treatment supplies, including RDTs, prepackaged malaria treatment in treatment envelopes, reporting forms, rapid counseling cards, treatment regimen guides, and referral form books.

Certificate of completion. Designed with the LMBP signature campaign colors and laminated for durability in the mining environment, certificates were presented to trained VMTs following their assessment at their first supervisory visit. The certificates served to formally recognize VMTs as a part of the MOH’s RDT program and to be a symbol of accomplishment and pride for testers.

Rapid Counseling Cards. With images on the front sides and key information about malaria prevention, transmission, and treatment on the back, this set of cards was used to train VMTs to provide tailored, efficient, and effective counseling to clients on malaria. The use of simple language reinforced by illustrations made the content easily understandable for VMTs and clients.

Treatment Adherence Handouts and Envelopes. Guyana has three different types of malaria infections (*Plasmodium vivax*, *Plasmodium falciparum*, and mixed infections), each with a different treatment regimen. To simplify the treatment guidance and improve adherence, Breakthrough ACTION developed handouts clearly depicting which medication needed to be taken on which day or at which time. Images also showed the decrease in the number of parasites in the body until being completely gone at the end of the treatment, conveying the importance of adherence in order to cure malaria. Later in the project, Breakthrough ACTION shifted from handouts to treatment adherence envelopes,

in which the appropriate medication was prepackaged in waterproof envelopes with the corresponding treatment images.

Referral forms. Given that VMTs are only qualified to treat certain types of clients and cases of malaria, Breakthrough ACTION developed a simple referral form for VMTs to use to refer any pregnant women, children under 15 years, individuals with complicated malaria cases, or clients who tested negative for malaria to a health facility. The form could also be used in the event of stock-outs to refer clients to a health facility or another volunteer tester.

The project recognized high-performing testers through the provision of promotional materials based on their level of achievement (e.g., t-shirts, caps, umbrellas, backpacks), as well as through posts on Facebook and in WhatsApp groups celebrating their hard work and dedication.

▶ Results

Over the course of the project, Breakthrough ACTION and the MOH achieved the following:

- 80 testers (59 from Region 7 and 21 from Region 8) trained and provided with the VMT package
- 413 rapid counseling cards, 362 treatment regimen guides, 422 treatment adherence handouts, and 391 referral booklets disseminated
- 10,212 treatment adherence envelopes disseminated
- 8,312 miners and mining community members tested for malaria by VMTs
- 25% of miners in Region 7 and 52% in Region 8 reported access to a VMT in a five-kilometer radius
- 32% of miners surveyed in 2022 knew about the VMT program

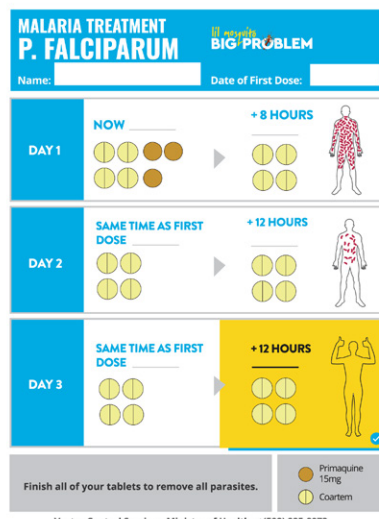
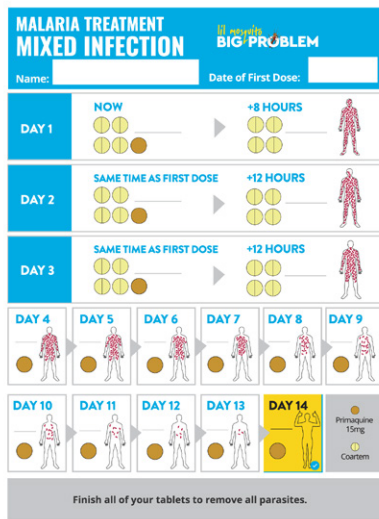
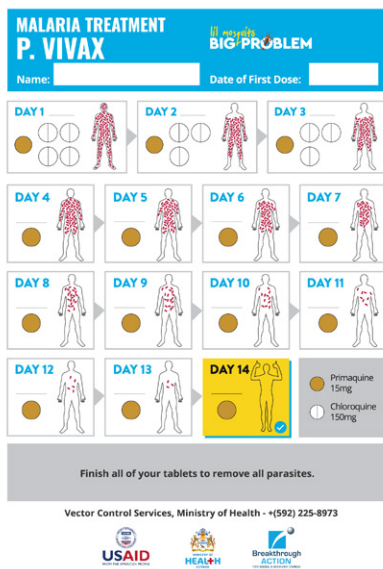
▶ Lessons Learned

- **Branding VMTs enhanced credibility, benefiting testers and clients alike.** Prior to Breakthrough ACTION's interventions, VMTs had little visibility. Making the cadre "official" through professional signage, certificates, SBC tools, and various forms of promotion elevated their credibility. Other miners in the camp and surrounding communities were not only more aware of the VMTs' services but saw the VMTs as valid and trustworthy. The VMTs, in turn, took more pride in their role. Several hung their certificates in locations where they could be easily seen, and some wanted their pictures included in their certificates. The recognition of their efforts went a long way toward increasing motivation.
- **High VMT turnover requires innovative strategies to sustain motivation, retention, and continuity in malaria service delivery.** Mining populations are inherently mobile. Miners tend to follow the gold, relocating when there's a gold shout or when other life circumstances dictate a move. As such, Breakthrough ACTION and MOH often found during supervisory visits that trained VMTs were no longer active in certain areas. While some communicated their relocation in advance, many did not, resulting in a break in services. Future projects should consider recruiting and incentivizing stable workers likely to have a consistent presence, such as shopkeepers, training multiple VMTs at a



given location, creating regional WhatsApp groups for VCS and VMTs to enhance communication, and increasing the frequency and consistency of supportive supervision visits so gaps in service can be quickly identified and remedied.

- Visual depiction of the number of malaria parasites decreasing in the body until being completely eliminated on malaria treatment packaging improves adherence.** One of the insights discovered during Breakthrough ACTION's human-centered design research was that miners often did not complete their malaria treatment. Reasons included side effects, feeling better, forgetfulness, and wanting to save medication for the next time they were sick or to share with others. Many did not believe that malaria could be cured, but that malaria parasites were bound to "raise up" again. The inclusion of images on the malaria treatment envelope of the number of parasites decreasing in the body helped drive home the point that malaria could, in fact, be cured, which helped motivate adherence.



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