MUSO Trip Report Bamako, Mali Feb 20-21, 2020

FP Staff: Whitney Shaefer, Elliott Gilson (Board Member) MUSO Staff: Stephanie Rapp (Global Partnerships Manager), Dr. Djoumé Diakité (Mali Country Director & Co-Founder), and team.

Intro:

Created in 2005 by a group of Malian and American collaborators, including the following active team leaders: Dr. Djoumé Diakité (Mali Country Director), Dr. Fousseni Traoré (Pharmaceutical Stock Manager), Moise Samaké (Director of Human Resources), Dr. Jessica Beckerman (Chief Medical Officer), and Dr. Ari Johnson (CEO). As researchers in Mali, Muso's co-founders, found themselves attending the funerals of babies and young mothers weekly, and accompanying their Malian neighbors as they struggled and often failed to access health care. It was out of these experiences that they founded Muso.

Muso's mission it to eliminate preventable deaths in the world's most impoverished communities by employing a cadre of community health workers (CHWs) using proactive care strategies to ensure children are treated at the earliest signs of illness. The efficacy of this model relies on professionalizing CHWs, who are trained to recognize 16 signs of serious illness. CHWs go door-to-door in their communities, prioritizing homes with young children. They bring critical services into the home, provide on-the-spot treatments, and refer acute cases to the next appropriate level of care. At the clinic level, Muso improves the quality of care by building the capacity of medical staff and making crucial infrastructure upgrades. Muso also currently pays user fees across the spectrum of care, effectively making treatment free for all patients.

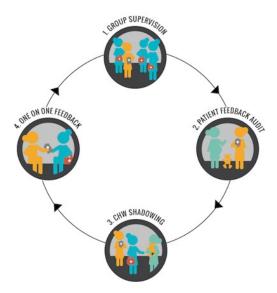
Programs:

Muso's program is centered around the idea of proactive healthcare and the use of CHWs. This model brings access to healthcare quickly, early to some of the poorest communities in Mali. The model has three parts:

- 1. Proactive Search Community Health Workers and community members search for patients through door-to-door home visits, to connect them with care early.
- 2. Doorstep Care CHWs provide a package of life-saving health care services in the home. These include family planning, newborn screening, and treatment for children with malaria, diarrhea, and malnutrition.
- 3. Rapid-Access Clinics Muso removes point-of-care fees, builds infrastructure, and trains staff, so that government clinics can provide universal, early access to care.

To keep up the quality and consistency of the healthcare as well as the knowledge and training of the CHWs, Muso created what they call the 360-degree Supervision Model. This system to actively and regularly mentor CHWs for improved performance, including efficiency and quality of care.

360 Supervision Model:



- 1. **GROUP SUPERVISION** Supervisor leads a group discussion of the common challenges and potential solutions faced by CHWs, reviews and reinforces key competencies and skills, coordinates stock monitoring and resupply for each CHW, and organizes the month's individual monthly supervision sessions.
- **2. PATIENT FEEDBACK AUDIT** Supervisor conducts home visits without the CHW present to receive performance feedback on a monthly basis.
- **3. CHW SHADOWING** Once per month, supervisor directly observes as the CHW provides care during home visits.
- **4. ONE ON ONE FEEDBACK** Supervisor and CHW sit down together to set goals and identify areas of strength and improvement using personalized performance metrics and visual displays.

Muso operates in the Peri-urban district of Yirimadio (population 250,000+) and 8 sites in the Bamkass region in rural Eastern Mali. The results so far have been striking:

- 6,099,789 Home visits conducted
- 675,968 Clinic visits
- 429 CHWs
- 98% of patients treated within 72 hours

Infant and Child mortality was the driving force behind the creation and implementation of the programs that Muso created in Mali. Under 5 Child Mortality rate was 1 in 7 and by 2015 it has been lowered to 1 in 142, comparable to the United States.

Key Takeaways:

- 1-2 potential new partner country expansions (only French speaking, only where there
 are no other CHIC members, only countries that haven't met sustainable development
 goal child and maternal mortality rates, reach at least 125K new people, want to
 influence global conversation and policies which is not conducive to moving into a
 country that is too similar or simply continuing to expand direct sites in Mali)
- Concern over "watering down" of Muso model during in-country and new country expansion
- Leader in proactive CHW care (first in Mali) and only one in country with an app for CHW data
- Muso purchases meds to fill stockout gaps
- Family planning hasn't been formally measured but seems that Muso is having a positive effect (Muso studies can't capture maternal mortality because measured by 100,000 people)
- Unclear what incentive CHWs have to perform better
- New study results are coming out this year or next, since they are double blind studies, even Muso doesn't yet know preliminary results

Funding Opportunities:

- M&E
 - Data warehouse
 - Build up M&E team collect a lot of data but need more resources for analysis
 - Capacity building with ministerial partners so they can perform rigorous evaluation
- New CSCOM (Community health center) clinic (~\$160K need plot) or current clinic expansion (built with World Vision)
- Tech and Innovation
 - Medic Mobile App add function to see if CHWs are reaching entire catchment area (equity analysis), also want to add supervision indicators
 - Tech at clinic level
 - Scaling tools with government
- Cote D'Ivoire Rollout focus on 360 supervision in a technical assistance role, possible direct sites farther in future (Coronavirus may affect this)
- Mali Expansion technical assistance to government in rolling out Muso program
 nationally (will stay in Mali until government can provide similar level of care in those
 sites, may be a few decades)

Visit Summary:

- Day 1: Met with Global Partnership's Manager, Stephanie Rapp, Muso's CHW Manager Seydou, and followed CHW Habibou on home visits in peri-urban community. Tour of Yirimadio Community Health Center (CSCOM - 3rd tier of 3 hospital levels) and meeting with Dr. Bourema Cissé, Technical Director. Visited Muso office to meet with program, research, and M&E teams.
- Day 2: Followed CHW supervisor on CHW supervision visit. Met with technical assistance, government partnership and new country expansion teams.

Trip Photos:

Day 1 -



Muso HQ in one of the safer areas of Bamako. We spent a lot of time there with the team!



Habibou is a Muso CHW (left) that we followed for several visits on her daily route. She pulls double duty with a baby on her back while conducting her valuable visits.



Finger prick rapid results malaria test about to be administered.



Checking to see if child is properly nourished. He is!



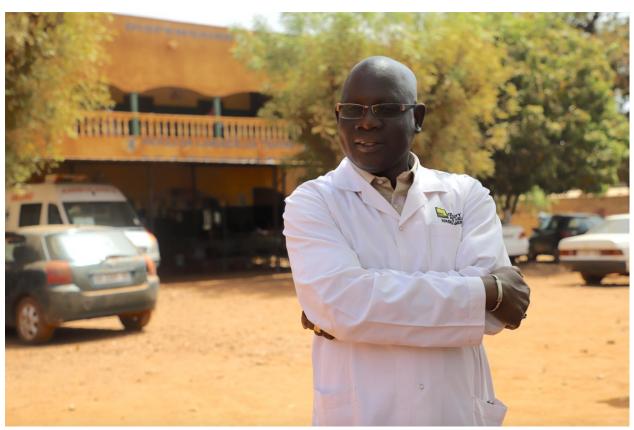
Phone app the monitors breathing of the child. One small part of how the whole visit is logged using the app created in conjunction with Medic Mobile



Standard for multiple families to live together so there are many children in each house complex. This allows the CHW to see a lot of patients in one day, but the cramped conditions can cause illnesses to spread more quickly.



The 1 CSCOM (Community Health Center) that serves the entire population of Yirimadio. Muso clients receive discounts on all procedures and referrals. #1 item needed for greater access to medical care is the building of a second CSCOM.



The one who runs its all – Dr. Bourema Cisse

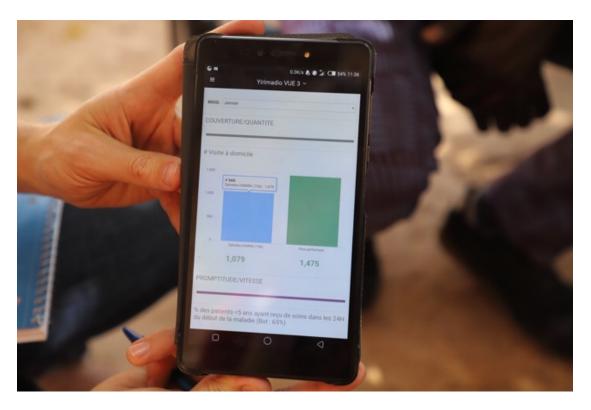


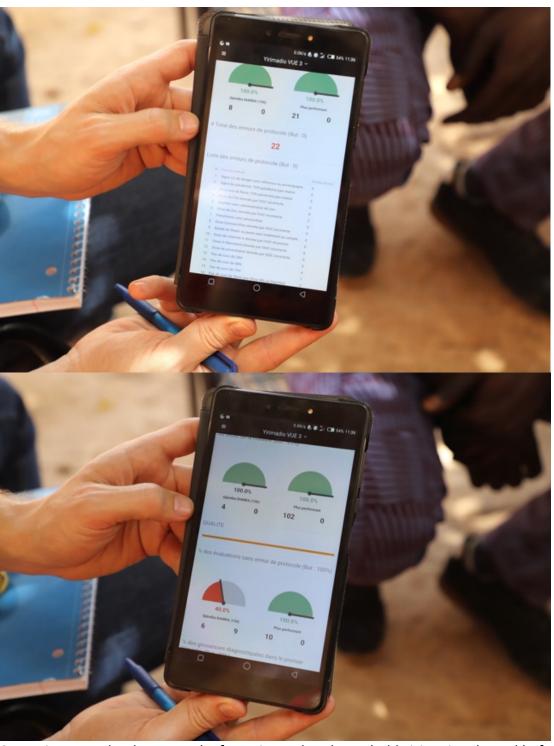
Meeting in the Muso offices with Dr. Djoumé Diakité (Mali Country Director) and staff.

Day 2 -



CHW Supervisor meeting with one of his CHWs. Demonstrating the 360 model and importance of consistency and quality of care delivered.





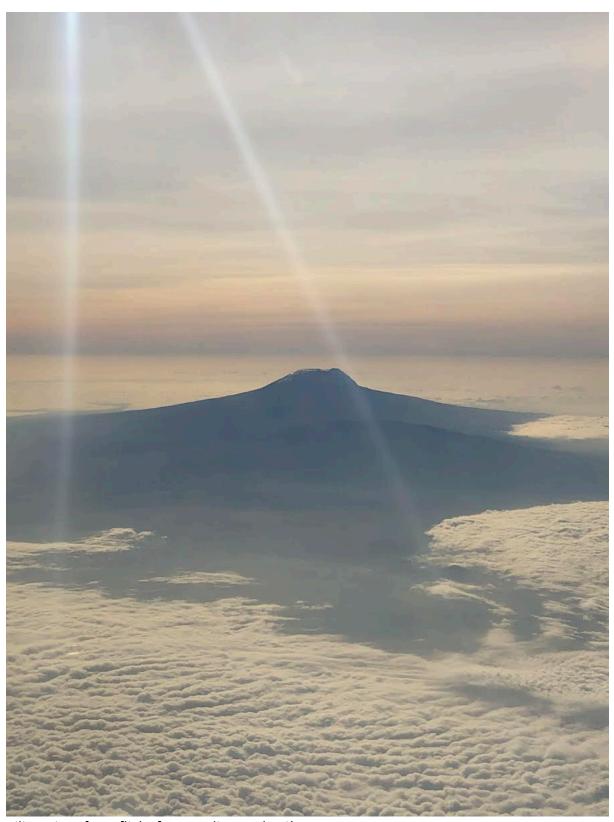
Supervisor App that keeps track of metrics such as household visits, time lapsed before follow-up visit, patient care received, medications dispursed, etc.



Typical sight throughout Yirimadio and Bamako



But some is serene and beautiful. (Niger River from hotel at sunrise)



Kilimanjaro from flight from Mali to Malawi!