

A photograph of a woman in a rural, arid setting. She is wearing a green headwrap and a patterned top. She is carrying a young child on her back and holding a large, shiny metal bowl. The background shows dry trees and a dirt path.

# 2019 Q1

## IMPACT REPORT

Dear friends,

Thirteen years ago, Muso was founded by a small group of Malians and Americans. In one of the toughest places to live in the world, with some of the world's worst health outcomes, we sat at the funerals of children who had been our neighbors and made a shared commitment: no one should die waiting for health care. On February 26, 2019, Mali's President, Ibrahim Boubacar Keita, echoed that vow, as he announced a complete overhaul of Mali's health system.

President Keita [committed](#) to a complete re-boot of the national system and substantially greater investment, from both domestic and international sources, in primary health care at both the clinic and community levels. The government will provide free care for children under five, pregnant women, and elders, as well as contraceptives without cost, at strengthened primary care clinics nationwide. Paid, professionalized Community Health Workers (CHWs) will serve as the front line of this plan, providing health care free of charge for all patients in the community. As core strategies Muso has tested with the government roll out over the next four years, our [360° Supervision model](#) will be one of the fastest-moving pieces of this plan: government rollout this year will provide foundational quality control to the reform and supportive supervision to CHWs across Mali.

Mali's health system reform, steered by the bold and visionary leadership of Minister of Health Samba Sow and his team, promises to rewrite the story of health equity in Mali, and drive improvements in access to care, maternal health, and child survival in communities across the nation. Now the work begins to deliver on the promise of this reform for Mali's 18 million patients. Our team is now mobilizing to intensify our technical assistance to the reform process.

The stakes of this reform effort could not be greater, as we and our government partners commit to bring care to every patient, no matter how difficult the circumstance. Even as we celebrate a momentous moment of national-level policy change, our team is mourning multiple instances of violence that have touched our sites in the rural Bankass District of Mali this quarter. On New Year's Day, gunmen entered one of the villages we serve, and killed 37 of our patients. This attack brought greater military presence to the region, and a cooling-off for some weeks, but on March 23, another 164 of our patients were killed in a [massacre in the village of Ogassagou-Peuhl](#). No members of the Muso team were injured. Together with our government partners, our team mobilized to care for the more than 60 wounded survivors of the incident, and to mourn with the families of the deceased. Since Q4 2018, we have launched an emergency plan of action to stock supplementary medicines and supplies, expand our ability to bring health care providers to where they are most needed, reinforce security measures to safeguard our team, and treat the rising numbers of malnourished, sick, and injured patients conflicts like this create.

Thank you for standing with our team and our patients in these moments of victory and struggle, and for your partnership in affirming the immeasurable value of every human life.

In solidarity,

The Muso Team

# MILESTONES

## SERVICE TO DATE

 HOME VISITS  
4,724,899

 CLINIC VISITS  
527,867

 CHWS  
381

## PROACTIVE CARE IN Q1



CHW HOME VISITS FOR ACTIVE CASE FINDING, DIAGNOSIS, TREATMENT AND FOLLOW UP

Q1 2019 279,167 HOME VISITS

Q1 TARGET 364,500 HOME VISITS



COMPREHENSIVE AND FREE CLINIC-BASED CARE FOR VULNERABLE PATIENTS

Q1 2019 25,689 CLINIC VISITS

Q1 TARGET 25,000 CLINIC VISITS



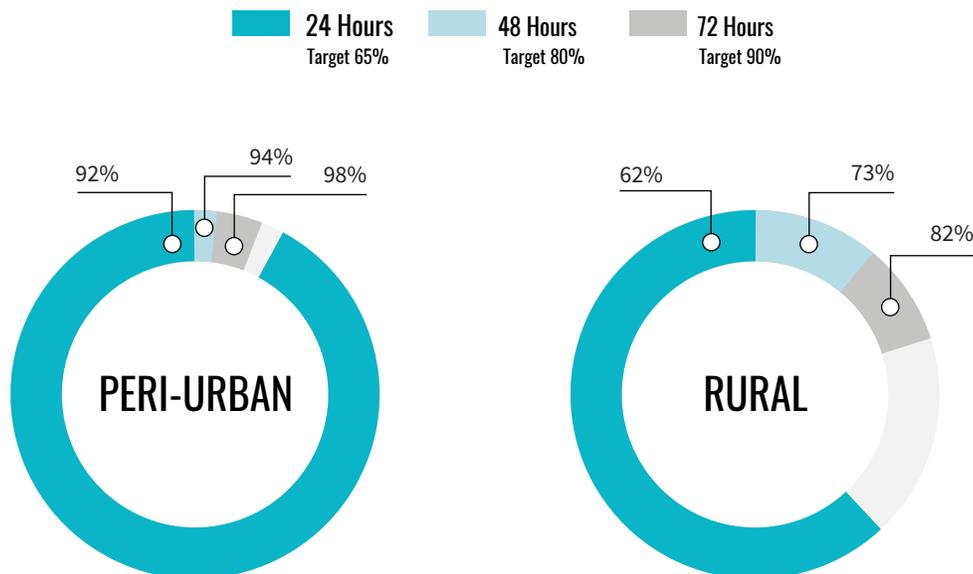
**738**  
New Pregnancies Detected Through Proactive Care



**1,155**  
Family Planning Dispensed

## SPEED

MUSO CHWs AIM TO REACH EVERY PATIENT WITHIN 24 HOURS OF THEIR FIRST SYMPTOM



\*In order for our study team to remain unbiased, we are unable to disaggregate data between the passive and proactive arms of the ProCCM Trial, the Randomized Controlled Trial embedded in our rural care delivery. We therefore anticipate some indicators will be lower than they might be otherwise, as our seven RCT sites are comprised of half passive CHWs, who are not conducting proactive case detection.

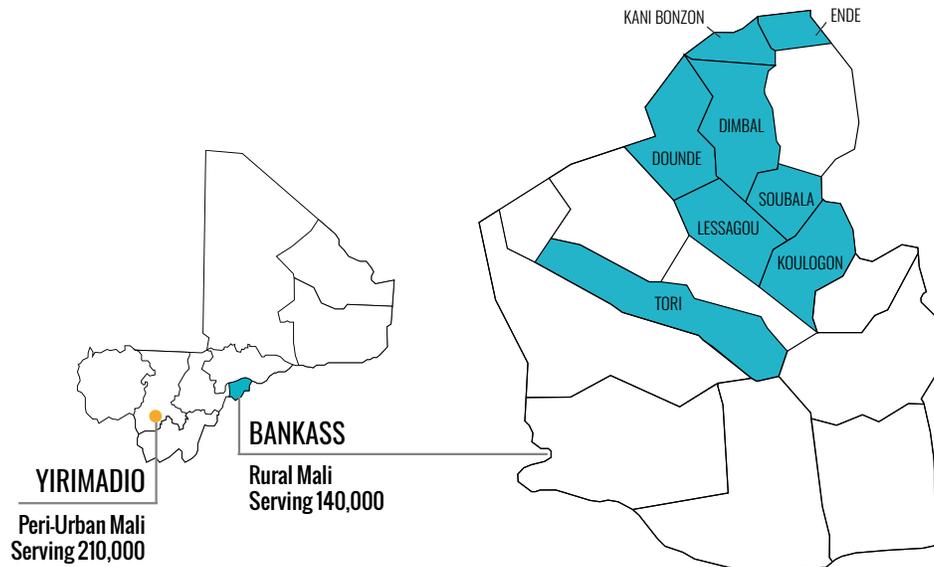
# QUARTER 1 PROGRESS

## Successes

- *Mali's national reform commits to scale many of the strategies Muso has tested with our government partners for more than a decade. Muso will provide intensive technical assistance to support the plan to deliver impact for patients across the country.*
- *Muso's direct service expansion plan is progressing, and we are engaging with a short list of potential second-country partners on an ongoing basis.*

## Challenges

- *Our team is mourning the loss of life in our Bankass sites due to extremist activity and inter-ethnic conflict fomented by extremists.*



## Yirimadio Operations

The measles outbreak in our peri-urban site continues, with 73 cases confirmed since the start of the outbreak last quarter, and the majority identified by CHWs during proactive case detection home visits. Fortunately, after early detection, no deaths of Muso's patients due to the disease have been reported. We have lost two patients outside of our health system to measles. One was a patient from outside Muso's catchment area, who first sought care elsewhere, and then later sought care at the Yirimadio health center. The second patient we lost to measles was a child from a family that had declined care from the health system, including CHW care. Following the death of their child, as well as community and CHW intervention, the family has now agreed to engage in care, and we have been able to support their other children with vaccination and health care.

As our veteran Community Health Workers in Yirimadio have been managing this outbreak, they have been delivering care from the world's fastest health system. In Q1, Yirimadio CHWs reached 92% of children under five within 24 hours of symptom onset—an unprecedented delivery speed in our peri-urban site. Muso is currently conducting an internal audit on this data, to investigate and understand the factors that may have influenced this extraordinary result.

## Bankass Operations

Security conditions in our Bankass sites continued to deteriorate, and because of the security situation patients in these areas are facing challenges seeking care at the clinic. Given the importance of reaching patients with care quickly, Muso is building out two mobile clinics to bring medical and obstetrical care to villages that are unable to access clinics because of security risk. We are also working to provide psychosocial support tools for community and team members, to process together the trauma of this atrocity and build resilience in the face of ongoing conflict.

Due to the nature of the ethnic conflict and to minimize risk, in insecure areas we have aligned the ethnicity of CHWs with the villages they serve (previously, Peuhl CHWs served Dogon populations and vice versa; this pattern is maintained in the majority of our sites). While CHWs continue to operate in 90% of Muso's coverage area across Bankass, sites where we have removed CHWs from live-in service will now be cared for by a mobile CHW team rotating between villages during daytime hours.

# QUARTER 1 PROGRESS

## Research and Data Systems

Muso's year two data collection for the [ProCCM Trial](#), our embedded 2017-2020 Randomized Controlled Trial testing the impact of proactive CHW workflow on child mortality, began as scheduled in February. Given the security situation in the Bankass sites hosting the Trial, we have put our comprehensive security protocols into effect to protect our research team and patients. Additionally, in the lead-up to this data collection survey, we have broadcast messages about the nature of the survey and Muso's continued efforts to build trust across communities.

Our Community Health Workers continue to struggle with support from the mobile CHW App due to both slowdowns in the software and short phone batteries on their issued phones. Slowdowns within the App come as we stress test what it takes to provide universal health coverage in some of the most difficult environments—with CHWs providing an order of magnitude increase in access, generating a commensurate order of magnitude increase in data, serving in remote off-grid areas where the software needs to function offline, and using low-cost phones that could be rolled out at a large scale. In Q1, Medic Mobile built and launched a purge function within the CHW App, which removes older historical data once it has been synced with a central server. Initial reports indicate that purge has significantly improved speed of the CHW App. Medic Mobile also introduced the ability of CHWs to mute households—an important feature for accurately measuring household coverage—and together we launched Universal Health Coverage mode to support CHWs' UHC delivery. In Q1, Muso collected phones from CHWs for reconfiguration, which lasted a full month, and required our CHWs to revert to paper backup and to subsequently re-enter data a month later. These transitions came with extensive training needs, created double-data entry work for CHWs, and reduced the time CHWs had to conduct home visits in the first quarter. This important upgrade reorganized families by household, instead of by concession, in order to provide more precise information on the extent to which CHWs effectively reach every household. Muso continues to collaborate with Medic Mobile to address these technical issues, with an eye towards building a tool that equips CHWs with the support they need to deliver care in a low-bandwidth environment, and that accurately reports care delivery in a high-volume health system.

## Partnerships and Advocacy

Muso's government partnerships team has provided extensive support to the design of Mali's national health reform, working closely with the Minister of Health's leadership team, the Clinton Health Access Initiative, and other partners. The government used research it conducted with Muso to prioritize key strategies and project the price tag of the nation's move toward universal health coverage. We continue to provide intensive technical support to plan, operationalize, and finance the reform commitments, and to scale Muso's 360° Supervision model nationally this year as a major early deliverable of the plan. We are working to build out a dedicated technical assistance team that will deploy in support of both Mali's national policy commitments and potentially for international partners as our expansion plan progresses.

Our team visited Côte d'Ivoire in January at the invitation of the country's Ministry of Health, to present our recently published research on ProCCM and on 360° Supervision, and to learn about their vision for the future of primary health care in the country. A delegation from the Côte d'Ivoire Ministry of Health then made a reciprocal visit in March to Muso and the Malian Ministry of Health, to see our implementation research sites firsthand.



## Mali can be an example for other nations.

-Oumar Seydi of the Bill and Melinda Gates Foundation on the national health reform announced this quarter.

Read more about how Mali can create the best community health system on the continent, and a model for the world from the [Malian Ministry of Health](#), [Muso](#), [The Guardian](#), and the [Financial Times](#).

# FINANCIALS

Total Q1 revenue of \$1.5 million was aligned with projections. Revenue and cash flow projections for the rest of 2019 are positive, with higher-than-projected and multi-year commitments from Muso's partners committed for Q1 and Q2 in service of our strategic expansion, as well as security-focused emergency funding to support our Bankass team's operations and safety.

Expenses of \$1.6 million came in under our projected \$2.3 million in spending for the quarter. This was primarily due to banking issues in January, when an intermediary bank involved our US-Mali funds transfer refused to release funds without cause or explanation. Using a different intermediary bank, we were eventually able to transfer the necessary funds and did not see a break in essential health care costs, but this led to some operating and programmatic expenses being pushed out to later months. To prevent future shocks of this nature, in Q1 Muso's Board of Directors passed a resolution to open a second bank account in Mali. Q1 2019 also continued to see a favorable USD-CFA exchange rate, which contributed to expenses coming in under our conservative estimates.

## Statement of Financial Position

	Q1 2019*	2018*
<b>ASSETS</b>		
Cash and Cash Equivalents	2,314,120	2,806,927
Pledges Receivable		
Prepays & Other Assets	76,273	61,906
Fixed Assets, net	212,998	96,403
<b>Total Assets</b>	<b>2,603,391</b>	<b>2,965,235</b>
<b>LIABILITIES AND NET ASSETS</b>		
Accounts Payable & Accrued Expenses	97,224	177,327
Other Current Liabilities	86,358	62,165
<b>Total Liabilities</b>	<b>183,582</b>	<b>239,491</b>
<b>Net Assets</b>		
Unrestricted	1,403,856	2,089,614
Temporarily Restricted	1,015,954	636,130
<b>Total Net Assets</b>	<b>2,419,810</b>	<b>2,725,744</b>
<b>Total Liabilities &amp; Net Assets</b>	<b>2,603,391</b>	<b>2,965,235</b>

\* unaudited

## Total Budget Over 3 Years



## Statement of Activities

	Q1 2019*	2018*
Total Revenue	1,530,716	6,396,250
Total Expenses	1,556,135	5,819,302
<b>Net Revenue</b>	<b>(25,419)</b>	<b>576,948</b>

\* unaudited

