Dear friends,

This was a historic quarter for our team. In September, after 14 years in Mali spent working toward a common vision of early care for all, we signed an agreement to launch a new partnership with the Ministry of Health of Côte d’Ivoire. Muso has long understood that our work in Mali is only the first step in our mission. No one should die waiting for care, no matter where they are born. In our 2019-2023 strategic plan, we committed to serve beyond Mali, to help solve this global injustice.

The government of Côte d’Ivoire has launched a national effort to provide universal access to health care across the country. In less than two years, they have trained, deployed, and are paying more than 9,000 Community Health Workers providing evidence-based care, as the first step along this path. Côte d’Ivoire’s Ministry of Health has asked for Muso to partner with them in support of this effort. After an in-depth landscape analysis of the global health landscape and potential partner countries, Muso’s leadership team and Board of Directors made the decision to serve alongside the government of Côte d’Ivoire as it strengthens the country’s health system. Through our new partnership agreement, Muso will provide technical assistance for Côte d’Ivoire’s national community health program, in particular supporting them to adapt and scale our 360° Supervision strategy for dedicated CHW performance management. Our partnership will prepare the rollout of this evidence-based CHW supervision system nationally over an initial one-year period, during which Muso and the Ivorian government will jointly evaluate further collaboration opportunities.

In Mali, the national health reform moves forward. At the United Nations General Assembly in September, Mali’s President Keïta committed to grow the country’s spending on health from 4% to 6% of the national budget by 2022, a critical investment to ensure the reform’s success. The President underscored the values behind this commitment in a recent article where he wrote, “Investing in health is a clear priority and an essential foundation for the economic development of our country and our continent.” He also underlined the impact that the government’s joint operational research with Muso had on the development of the health reform, stating “our ambition now is to replicate this model nationwide.” Our team has spent the past months building out a dedicated technical assistance team to support this ambition and to be of service to partners beyond Mali.

Now we embark with our partners on the difficult journey of making these promises real. The 41 million people of Côte d’Ivoire and Mali are counting on their governments, and on all of us, to stand with them in the struggle for health care for all.

We could not have reached this critical moment without your partnership.

With gratitude,
The Muso Team
MILESTONES

SERVICE TO DATE

- **HOME VISITS**: 5,375,479
- **CLINIC VISITS**: 599,712
- **CHWS**: 381

PROACTIVE CARE IN Q3

- **CHW HOME VISITS FOR ACTIVE CASE FINDING, DIAGNOSIS, TREATMENT AND FOLLOW UP**
  - Q3 2019: 364,794 HOME VISITS
  - Q3 TARGET: 364,500 HOME VISITS

- **COMPREHENSIVE AND FREE CLINIC-BASED CARE**
  - Q3 2019: 43,951 CLINIC VISITS
  - Q3 TARGET: 25,000 CLINIC VISITS

- **NEW PREGNANCIES DETECTED THROUGH PROACTIVE CARE**: 729
- **FAMILY PLANNING DISPENSED**: 3,052

SPEED

MUSO CHWs aim to reach every patient within 24 hours of their first symptom

- **PERI-URBAN**
  - 24 Hours: 90%
  - 48 Hours: 94%
  - 72 Hours: 97%

- **RURAL**
  - 24 Hours: 63%
  - 48 Hours: 76%
  - 72 Hours: 88%

*Nb: 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.*

*Nb: In order to align with national reporting standards across all health care sites in Mali, Muso has aligned its month to run from the 26th-25th.*
QUARTER 3 PROGRESS

Successes

- A new partnership with the government of Côte d'Ivoire
- Mali's commitment to increase domestic spending on health from 4% to 6% by 2022
- Technical assistance team established

Challenges

- Our team and patients in Bankass continue to experience instability due to the region's insecurity

Yirimadio Operations

In Mali, one public primary care clinic, or CSCOM, is intended to serve 10,000-20,000 people. Yet this year, we estimate that the single Yirimadio clinic is serving a population of 210,000 people, and by 2020, that population will likely grow to exceed 230,000. Bamako is by some estimates the fastest growing city in Africa, and Yirimadio is likely the fastest growing part of Bamako. Muso has increased the capacity of the Yirimadio CSCOM through trainings, quality improvement initiatives, and by building infrastructure. But now, a second clinic is necessary to meet the needs of patients in our catchment area. Long lines and overworked providers risk discouraging patients from accessing care, compromising quality of care, and increasing staff burnout. The quality of care at our flagship site forms the foundation of our moral commitment to our patients, and is the basis of our credibility for driving policy change, providing technical assistance, and bringing our tested strategies to scale. So for the last year, Muso has begun collaborating and building consensus with community groups to mobilize government support for a new facility. We are now scouting sites where this second clinic can be built, aiming for a 2020 clinic opening.

Our peri-urban Community Health Workers serve a catchment of approximately 1,000 patients each. To keep pace with Yirimadio’s expanding population, we are now in the process of training and hiring 50 additional CHWs, for a total of 225 CHWs serving a population of 210,000 people. We will select these 50 from a pool of 130 who have applied and been selected for training.

Bankass Operations

The security situation in our rural sites has not significantly worsened this quarter. It has also not significantly improved. Muso’s emergency response plan has proved to be robust, with mobile clinic teams providing clinical care in communities where patients cannot travel safely to the nearest health center. We continue to provide mental health first aid for victims of trauma in the villages we care for and among our own team. We have reinforced security at our offices, increased emergency stocks in case supply chains are interrupted, and continue to liaise closely with local communities to protect staff as security threats evolve.

Tori, one of Muso’s eight rural sites that has acted as our rural pilot site for the ProCCM Trial, has become one of the most unstable and unpredictable sites of conflict within the district. Due to this, year three data collection did not take place in Tori, though the RCT in our study sites was not affected.

In recent months, Mali’s government has grown its military presence, and local and national efforts for peace and reconciliation have ramped up. We have been hopeful this will serve to secure the region. But in recent weeks, checkpoints helmed by militias have cropped up, which are hindering our team’s ability to move freely. We are exploring multiple options to mitigate the situation.
Research and Data Systems

CHW smartphone battery life has deteriorated more quickly than projected, making it difficult for CHWs to conduct proactive home visits and doorstep care with the CHW App. We have replaced failing batteries and telephones, and adjusted our forecasts for smartphone lifespan. Frequent software updates with the Medic Mobile-Muso CHW App have also been a major challenge for CHWs, as for some updates phones need to be powered down, collected from remote rural locations, reconfigured, and redistributed, taking CHW digital data collection down for a week or more with each update. The software updates have been more frequent in the past two years because Muso and Medic Mobile have been developing and testing several new tech tools together with support from the Bill & Melinda Gates Foundation. We are exploring different potential solutions to prevent software updates from disrupting care in the future.

Muso's ProCCM Trial follows 100,000 people in 137 village cluster sites within the Bankass district, where health care delivery and the study launched in early 2017. During Q3, BMJ Open published the study protocol for this Randomized Controlled Trial, detailing our plans and methods.

Partnerships and Advocacy

Last year, the Malian government committed to scale Muso’s 360° Supervision model nationally, which will provide a quality backbone for Mali’s national health care reform. The Global Fund has stepped up to support this national roll-out, and Muso has been asked to provide technical assistance to the Ministry of Health as it brings the model to scale. To do so, we have collaborated with key stakeholders to adapt and anchor 360° Supervision within the national health care system, build out a detailed implementation plan, and map where supervisors will be deployed to meet the needs of CHWs across the country. 150 Supervisors will support nearly 2,700 already-deployed CHWs. Last quarter, we embedded members of our team with five CHW Supervisor recruitment teams managed by the government, to support them to use our methodology for CHW Supervisor recruitment and selection across five different regions of the country. Muso designed and completed a training of government trainers, a national team of educators who are now in the process of deploying across five regions of the country to train 150 CHW Supervisors. At the request of the government, we have worked with Medic Mobile to develop a version of the CHW Supervisor App for use by all CHW Supervisors nationally.

In September, Muso supported our Malian government partners at multiple events related to the opening of the 74th session of the United Nations General Assembly, including participating in the High-Level Meeting on Universal Health Coverage convened by the UN. As a member of the Community Health Impact Coalition, we also contributed to a workshop on optimizing Community Health Worker programs for impact through the Community Health Worker Assessment and Improvement Matrix. USAID, UNICEF, and the Community Health Impact Coalition together published the revised AIM tool in December 2018. The coalition is now working with partners to support this tool’s uptake, as part of our collective efforts to address the quality crisis in community health.

Team

Dr. Christian Rusangwa joined Muso as Technical Assistance Director. Christian comes to Muso from Partners in Health, where he served as Deputy Chief Medical Officer and worked closely with Rwanda’s government to support the scale-up of evidence-based interventions. He previously worked with the Clinton Health Access Initiative on health care financing, and in a Congolese refugee camp where he led the provision of care and referrals.

Caroline Whidden was promoted to Director of Research, Monitoring, and Evaluation. Caroline has worked with Muso since 2015, most recently as Research Coordinator. She led the recently-published study on 360° Supervision and the CHW Dashboard, the results of which changed national policy in Mali. A Rhodes Scholar, she holds a Master of Science in Global Health Science and a Master in Public Policy from the University of Oxford.

Dr. Kassoum Kayentao, previously Muso’s Director of Research, Monitoring, and Evaluation, has transitioned to the role of Muso’s Senior Scientist. He is one of Mali’s leading researchers and epidemiologists, and the author of over 40 peer-reviewed publications. His work has changed the World Health Organization recommendation and global best practice around preventative treatment of malaria in pregnant women. He brings to Muso his expertise in leading large-scale field research that changes global policy and practice. He also serves on faculty at the University of Bamako Malaria Research and Training Center.
In Q3 2019, revenue of $5.6M YTD came in at 120% of projections. Muso’s Board of Directors mandates that Muso maintain a cash reserve sufficient to fund at least four months of operations. We are fundraising to achieve our strategic goals while maintaining this level of cash reserve. Total expenses of $4.7M YTD came in under projections due to certain spending delays, including the decision to not conduct the year three survey in Tori due to security concerns, and new positions hired later than projected. This year’s favorable exchange rate continued to benefit us, and we retained a strong cash reserve throughout the quarter.

In Q3, we received a clean audit report for our 2018 financial statements. For a copy of the audit, please reach out to Julia Berman, Chief Partnerships Officer, at jberman@musohealth.org.

### Statement of Financial Position

<table>
<thead>
<tr>
<th></th>
<th>Q3 2019*</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
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<tr>
<td>Cash and Cash Equivalents</td>
<td>3,918,514</td>
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<td>Pledges Receivable</td>
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<td>Prepaids &amp; Other Assets</td>
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<td>Fixed Assets, net</td>
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<td><strong>Total Assets</strong></td>
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<tr>
<td><strong>LIABILITIES AND NET ASSETS</strong></td>
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<tr>
<td>Accounts Payable &amp; Accrued Expenses</td>
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<td>Other Current Liabilities</td>
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<td><strong>Total Liabilities</strong></td>
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<td><strong>Net Assets</strong></td>
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<tr>
<td>Unrestricted</td>
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<tr>
<td>Temporarily Restricted</td>
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<td><strong>Total Net Assets</strong></td>
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<tr>
<td><strong>Total Liabilities &amp; Net Assets</strong></td>
<td>4,259,886</td>
<td>3,004,899</td>
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* unaudited

### Statement of Activities

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<tr>
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<th>Q3 2019*</th>
<th>2018</th>
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<tbody>
<tr>
<td><strong>Total Revenue</strong></td>
<td>5,626,469</td>
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<td><strong>Total Expenses</strong></td>
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<td><strong>Net Revenue</strong></td>
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<td>576,948</td>
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* unaudited