INTRODUCTION

The Rotary Foundation’s (TRF) first program of scale (PoS), Partners for a Malaria-Free Zambia (PMFZ), deployed an integrated community case management plus (iCCM+) intervention in ten underserved districts in Zambia’s Central and Muchinga provinces, in line with the Ministry of Health and National Malaria Elimination Centre’s (NMEC) strategic plan. PMFZ also directly engaged Rotarians and Rotaractors in the intervention with the aim of contributing to the success of this intervention and of building enthusiasm and support for malaria programming more broadly.

The program’s objective is to reduce cases of malaria, especially severe malaria and death, particularly for pregnant women and children under 5, by increasing community-based testing and treatment. As PMFZ enters its final year, TRF has commissioned an evaluation of the program to understand the program’s effectiveness and glean learnings to help TRF and partners as they look to scale this model both within and beyond Zambia.

STRATEGIC GOALS

The results of the evaluation show that PMFZ has been effective in achieving its outputs and outcomes, doing so with relative speed, and in yielding some unexpected successes. We expect that as the intervention is in place for a longer period, the program may see additional progress towards achieving its goals of reduction in cases and deaths, however, these changes were not able to be seen within the scope of our evaluation. We found that the deployment of CHWs did lead to an increase in the number of tests in the community, and overall (see figure 1), as well as high levels of treatment within the community, in both provinces. Data also showed an increase in incidence of malaria, which we expect is likely attributed to increased testing, and which may decline over time, as the intervention contributes to overall control of malaria. These indicators should continue to be monitored.

This evaluation, led by Metrics for Management (M4M), sought to answer three research questions:

1. How well has PMFZ met its targets and made progress towards its strategic goals?
2. What aspects of PMFZ are most important for driving program effectiveness?
3. How scalable is PMFZ, and how can scalability be enhanced?

To answer these questions, we triangulated data from a variety of sources, including background documentation from the program and other relevant stakeholders, quantitative analysis of routine health data, qualitative analysis of key informant interviews and focus group discussions, and an original survey of African Rotarians. Within the report, we provide recommendations for programmatic improvement in Zambia, as well as considerations for new contexts. High level recommendations for new contexts are summarized here.

FIGURE 1. NUMBER OF MALARIA TESTS BY PROVINCE AND SERVICE TYPE
We investigated the drivers of program effectiveness primarily through qualitative interviews with key international and national stakeholders and focus group discussions with CHWs and program staff in four districts. The success of the program was driven by several factors including the full deployment of an accepted iCCM+ model that is strongly supported by the Zambian government, the community buy-in generated by inclusion of neighborhood health committees and local leaders, a successful partnership model, and the enthusiastic involvement and commitment of Rotary members. To sustain and improve upon these achievements in the intervention districts, we recommend that attention be paid to how CHWs and NHCs will continue to be trained and equipped with the enabling commodities they feel are necessary to do their jobs. Additionally, despite the expenses incurred to send Rotarians to project districts for key events, trainings, or study tours, both Rotarians and community health workers reported positive, intangible benefits of these engagements, including improved motivation, feelings of respect, and an appreciation of the program challenges and realities.

Rotarians in Zambia were found to be particularly effective advocates, intervening to address programmatic challenges, including through involvement on the national and provincial End Malaria Councils. Highlighted by the meeting between the Zambian President and president of Rotary International, many informants reflected on advocacy as a strength, and one which Rotary and Rotarians can further develop.

From the examination of drivers of effectiveness, we highlight two areas for future consideration. First, the evaluation was unable to determine the impact of community mobilization activities on community knowledge and attitudes towards malaria, or on seeking community-based testing. Second, our findings regarding data quality and data use are mixed. Informants agreed that the use of the existing, robust, national data system was important, and facilitated the inclusion of PMFZ into the broader Zambian malaria stakeholder ecosystem. The government is committed to generating and using quality data, and has been supported by other partners, including PATH. However, our analysis of data quality metrics suggests there continues to be opportunities for improvement, and that districts need additional support in this area.

The results of the evaluation of the PMFZ program can be summarized in the figure below; each area of the results framework was examined, and details are provided in the full report. The PMFZ team has reason to be proud of its work, and to believe that with continued financial support, the results will endure in the 10 project districts.

“Rotary ‘got it’ early. [They didn’t say,] ‘Look, this is a project. We’re going to do this. And here are the deliverables, tick the box, boom!’ They always defer to the Ministry of Health and the national program.”

International PMFZ Informant
1. Increased community access to malaria testing and treatment

2. NMEC managing reporting system flowing timely and quality data from PoS

Proposed: Rotary network supports CCM and broader malaria interventions in Zambia

Reduce malaria cases, especially severe malaria and death, particularly for pregnant women and children < 5, in PoS districts

Position Rotary members for a sustained role in malaria programming

Proposed: Meet criteria for scale-up of key elements of PMFZ model

Key: M4M proposed additions to PMFZ results framework/TOC for purposes of this evaluation

Exceeds Expectations

Meets Expectations

Unknown/Uncertain

Below Expectations
SCALABILITY

Our evaluation also focused on prospects for scaling the model, within and outside of Zambia. The summary below is most relevant for scaling outside of Zambia and is framed by the multidimensional Scalability Checklist. We find that the overall prospects for scaling the iCCM+ model with Rotarian involvement are strong, and bolstered by the high credibility of the intervention, as well as the financial commitment already made to its continuation. However, as this intervention, or a similar one, scales to new contexts, adjustments to the model will be necessary, and it will be essential to build in mechanisms to test how these adjustments affect the model’s efficacy.

Two areas of our scalability assessment deserve mention because they are contextually dependent, and could lead to poor future performance, if not considered carefully.

First, does the intervention have a relative advantage over existing practices? The iCCM+ intervention can be seen as having advantages over existing practices. Importantly, the intervention addresses an inadequate situation in the African region when it comes to access to care and continued high mortality of treatable childhood illnesses. The model on its own, however, will not solve major health challenges, like malaria. This should be kept in mind when setting program goals. Finally, while iCCM+ can be cost effective, sufficient resources need to be allocated to fully implement the model and close attention should be paid to the specific context to ensure the cost burden on clients is minimized and that CHWs are receiving the appropriate salaries or subsidies as required.

Second, how easy is the intervention to transfer and adopt? We find that this will be highly context dependent. No matter where iCCM is scaled, it is likely to require new human resources, and may also require new systems or infrastructure. Trained CHWs will be necessary for iCCM to be implemented. In many cases, additional systems, such as data systems or commodity supply and distribution systems, may need to be developed or substantially improved.

FIGURE 3. SCALABILITY CHECKLIST: RELATIVE ADVANTAGE OF THE INTERVENTION

<table>
<thead>
<tr>
<th>Assessment Categories</th>
<th>maid A</th>
<th>Scaling up is easier</th>
<th>maid B</th>
<th>Scaling up is harder</th>
<th>maid C</th>
<th>Context Dependent</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Does the intervention have relative advantage over existing practices?</td>
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<td></td>
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<tr>
<td>12 ✔</td>
<td>Current situation widely considered inadequate</td>
<td></td>
<td>Current situation widely considered adequate</td>
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<td></td>
<td></td>
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<tr>
<td>13</td>
<td>Superior effectiveness to other alternatives clearly established</td>
<td>Little or no objective evidence of superiority to other alternatives ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>14</td>
<td>Substantially lower cost than existing or alternative solutions</td>
<td>Higher cost than existing or alternative solutions ✔</td>
<td></td>
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</tbody>
</table>

FIGURE 4. SCALABILITY CHECKLIST: EASE OF TRANSFERRING AND ADOPTING THE INTERVENTION

<table>
<thead>
<tr>
<th>Assessment Categories</th>
<th>maid A</th>
<th>Scaling up is easier</th>
<th>maid B</th>
<th>Scaling up is harder</th>
<th>maid C</th>
<th>Context Dependent</th>
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</thead>
<tbody>
<tr>
<td>E. How easy is the intervention to transfer and adopt?</td>
<td></td>
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<tr>
<td>15</td>
<td>Implementable with existing systems, infrastructure and human resources</td>
<td>Requires significant new or additional systems, infrastructure or human resources</td>
<td>✔</td>
<td></td>
<td></td>
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<tr>
<td>16</td>
<td>Small departure from current practices</td>
<td>Large departure from current practices ✔</td>
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<td></td>
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<tr>
<td>17</td>
<td>Fully consistent with government policy</td>
<td>Requires substantial change in one or more government policies ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>18</td>
<td>Few decision-makers involved in authorizing or approving adoption</td>
<td>Many decision-makers involved in authorizing or approving adoption ✔</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19</td>
<td>Proposed changes are highly structured or highly technological ✔</td>
<td>Heavily reliant on process, values and/or flexibility</td>
<td></td>
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<tr>
<td>20</td>
<td>Low complexity or easily implemented component-by-component</td>
<td>High complexity and need for implementation as an integrated “package” ✔</td>
<td></td>
<td></td>
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<tr>
<td>21</td>
<td>Compliance and quality of implementation easy to monitor</td>
<td>Compliance and quality of implementation difficult to monitor ✔</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>22 ✔</td>
<td>Able to be tested on a limited scale</td>
<td>Unable to test without adoption on a large scale</td>
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RECOMMENDATIONS

We make several recommendations throughout this evaluation. These recommendations, listed below, include those which surfaced directly from the data and interviews, as well as larger recommendations we offer for scale up. The six high-level recommendations for Rotary Healthy Communities Challenge Sustainability and Impact are further described on pages 45-47 of the report. We recommend TRF consider the following as it looks to sustain the impact of PMFZ and expand its role in community health through the Rotary Healthy Communities Challenge.

For PMFZ Monitoring

1 Incidence should continue to be monitored as the iCCM model continues to remain in place, even after the initial PMFZ PoS ends.
2 The ratio of treatment by CHW to CHW detected positive cases should be routinely examined at the district level, and anomalies should be further investigated for quality control purposes.
3 When up-to-date censuses are unavailable, alternative population estimates, such as spatial estimates produced by WorldPop, should be considered.

For Rotary Healthy Communities Challenge Scale

4 TRF and partners should assess the political environment and support change in any countries where scaling is considered.
5 Conduct thorough pre-assessments prior to scaling to new contexts to identify areas where the model may need to be adapted or where more effort may be needed up front, such as where policy changes may be required.

For Rotary Healthy Communities Challenge Sustainability and Impact

6 Prioritize both macro and micro level resource needs to ensure high quality data collection and use.
7 Advocacy is and should be nurtured as one of Rotary’s key strengths.
8 Rotary should maintain engagement in program implementation.
9 Continue to leverage opportunities to learn from the current program to optimize resources and impact.
10 Rotary should seek explicit partnerships with other key malaria actors.
11 Develop thoughtful monitoring and evaluation frameworks with indicators that are measurable and aligned with international and/or national reporting guidance.

TRF’s first large-scale foray into community health has been a success, setting the organization up well for sustained impact. There are strong prospects for contextually adapted scale-up to be impactful.

I believe there’s a lot more potential for funding in-country beyond the major players like PMI, Global Fund, those big funders. I believe that the power Rotary brings, that hasn’t really been tapped into, is not only getting Rotarians engaged in their clubs, but the members themselves and the connections and influence they have in the private sector.

International PMFZ Informant