

## **Request for Information PMI Insights for Malaria Program**

This is a Request for Information (RFI). This is not a Request for Proposal (RFP) or a Request for Application (RFA) and is not to be construed as a commitment to issue any solicitation or Notice of Funding Opportunity, or ultimately award a contract or assistance agreement on the basis of this RFI, or to pay for any information voluntarily submitted as a result of this request.

This RFI is issued for the purpose of offering the opportunity for interested Senegal-based organizations to partner with PATH to develop and implement a potential research opportunity. Therefore, this RFI serves to seek interested parties to provide recommendations and express interest in implementing a proposed scope of work to study care-seeking and case management of malaria. Specifically, requested activities could include, but are not be limited to: contributing to the development of the research protocol, conducting mixed methods data collection in communities and health facilities; hiring, training, and supervising field teams to carry out qualitative data collection and quantitative data collection; data analysis; and dissemination. The above scope of work is envisioned to take place in three districts within Dakar, Central, and Southeastern regions of Senegal.

Responses must be a maximum of ten pages in length and must focus on addressing the areas outlined in the 'Information Requested' section. Please do not submit applications, proposals, resumes, or promotional materials, as they will be discarded. The electronic submission must be written in English and typed on standard 8 1/2" x 11" paper (216mm by 297mm paper), single spaced, font size 12 with each page numbered consecutively. This RFI will be open from release April 21, 2022 through May 6, 2022 at 5PM Eastern Standard Time. Please send all responses to this RFI via email to [kvu@path.org](mailto:kvu@path.org) with a copy to [procreview@path.org](mailto:procreview@path.org).

Questions on this opportunity can be submitted to [kvu@path.org](mailto:kvu@path.org) by April 29, 2022 AT 5PM Eastern Standard Time.

### **Background**

The U.S. President's Malaria Initiative (PMI) Insights project is a multidisciplinary partnership that collaborates with PMI, other donors, in-country research institutions, and national malaria programs (NMPs) to create and implement high-quality, ethically sound program evaluation (PE) and operational research (OR) activities to inform PMI programs and the global malaria community. As one of its research priorities for FY2022, PMI Insights seeks support in conducting an assessment of care seeking behavior and management of febrile illness as it pertains to malaria case management in three prioritized districts in Senegal.

Care seeking for febrile illness is poor in most malaria endemic countries. Drivers and barriers to care-seeking are multifactorial at both the health-facility and community-level. In Senegal, the proportion of children with fever for whom care was sought has remained constant at approximately 50% since the 2008-09 MIS, and a surprisingly low proportion of children under 5 years with fever receive a diagnostic test. There are very limited data on care-seeking for and management of febrile illness in all age groups and how this may impact malaria case management. As Senegal shifts from a control phase to a context of malaria elimination, a better understanding of febrile illness care-seeking and case management is needed. The proposed study seeks to assess the care seeking behavior and management of febrile illness as

it pertains to malaria case management in three prioritized districts in the Dakar, Central, and Southeastern regions of Senegal. Specific objectives and sub-objectives of the study include:

- 1) To characterize the community-level care-seeking behavior and identify barriers or favorable factors to prompt care seeking for febrile illness in all age groups and in all settings (public, private, community, and at referral hospital, district health center, and health posts in urban and rural areas) in the targeted districts.
- 2) To assess provider behavior in terms of adherence to national malaria testing and treatment guidelines.
  - a. To assess service provider behavior and adherence to national malaria testing and treatment guidelines in all sectors and at all levels of the health system.
  - b. To assess the proportion of identified cases of febrile illness who effectively received a malaria diagnostic and appropriate treatment over a period of 1-2 years.

### **Proposed Scope of Work**

To support the implementation of this study, PATH seeks an interested research partner to support the activities necessary to finalize the design of the study, collect and analyze data, and interpret results. Specifically, the intended study will employ a mixed-methods approach using an observational exploratory design. Data collection will be organized into four components, described below, including a quantitative cross-sectional household survey, quantitative/qualitative health facility assessment, qualitative/quantitative community health worker (CHW) survey, and a qualitative community component.

Below, we have included the current four components of the envisioned study as well as their intended design.

#### **Component 1: Quantitative cross sectional household survey**

- *Sampling and sample size:* In each district, 40 clusters will be selected both in urban and rural settings in a manner proportional to the proportion of urbanization identified in the target district. Using simple random sampling, 20 households in each cluster will be selected to participate in the survey for a total sample size of 2,400 across the three districts.
- *Eligibility:* all residents of selected households will be eligible to be included.
- *Procedures and data collection:* The Malaria Indicator Survey will be streamlined and modified to focus on fever in the last two weeks among all household residents of all age groups (where care was sought and when, whether tested, treatment received). Additionally, questions about prevention behaviors that might affect care seeking, such as use of a bed net, will be included. The household questionnaire will be adapted to collect data on care seeking for residential structures such as informal Koranic schools.

#### **Component 2: Quantitative/Qualitative Health Facility Assessment**

- *Sampling and sample size:* Health facility surveys to assess provider behavior and performance related to malaria in all age groups will be performed in 10 public sector health facilities and a minimum of five private health facilities per target district. The study team will determine the number of private health facilities in each district and include at least 50% of those identified. Public health facilities should include all referral facilities (hospitals and health centers, between 1-4 facilities per district) and the remainder would be health posts.

- *Procedures and data collection:*
  - a) *Patient exit interviews:* all patients seeking care for acute care consultations will be asked to participate after their consultations.
  - b) *Qualitative/quantitative health facility provider survey:* The survey administered to providers at the health facility-level will explore a range of case management topics including but not limited to fever screening, factors impacting decision to test for malaria (via questions and scenarios), and availability of stock. The discussion guide for the qualitative component will be based on initial analysis of the quantitative survey to draw on themes and major predictors of fever management and perceptions of care seeking. The qualitative component will include focus groups and/or individual in-depths interviews (as needed) with health facility staff.
  - c) *Register data extraction:* For all health facilities surveyed, 2 years' worth of de-identified data will be extracted to collect data on the number of febrile illnesses recorded, other symptoms presented by the patients, and proportion tested by RDT.

### **Component 3: Qualitative/quantitative community health worker (CHW) survey**

- *Sampling and sample size:* A cross-sectional survey will be performed of 25% of all CHWs active in the target districts (about 12-38 CHWs depending on district).
- *Procedures and data collection:* The study team will review 1 or 2 years of CHW registers (depending on availability of records) to ensure universal testing of fever cases. The qualitative component will include focus group discussions and/or individual in-depths interviews to discuss CHW stock issues, supervision, training, continuing education, compensation, other income generating activities that may impact availability, degree of community support, other challenges with patient management, and perceptions around care-seeking. If possible, focus group discussions will also be held with traditional practitioners and pharmacists as alternative points of care.

### **Component 4: Qualitative community component**

- *Sampling and sample size:* Focus group discussions will be held with a maximum of eight respondents per target group. In total there will be 37 focus group discussions held, 12 in each of the target districts in Tambacounda and periurban Dakar and 13 in the district of Touba.
- *Procedures and data collection:* Focus group discussions will be organized with caregivers, pregnant women, heads of household and other adult members of the households on topics related to care-seeking behavior and decision making. Focus group discussions will be held in urban settings (locality housing the District Health Center) and rural settings (one locality housing a health post and one housing a health hut or community health worker).

Overall, the research partner will support the activities necessary to finalize the study design, collect data, and analyze and interpret results. Based on current NMCP programmatic priorities around care-seeking and case management, the study will be conducted in select health districts in the regions of Diourbel, Dakar (peri-urban district), and Tambacounda. Data will be collected in a number of health facilities and select urban and rural settings in the communities in each of the three districts. It is envisioned that data will be collected during the peak malaria transmission season (September-November 2022), with overall activities spanning 21 months (from protocol development to final write-up).

To that end, envisioned activities for a partner institution may include, but are not limited to:

- Contribute to the finalization of the research protocol and data collection tools.
- Support the obtainment of national research ethics and other required approvals to conduct proposed activities in Senegal.
- Engage with PMI/Senegal, the National Malaria Program, and national, regional, and district level stakeholders throughout the research process to keep them informed of next steps and their requested involvement.
- Collect/collate and summarize available data to inform the selection of households, health facilities, and community members for the quantitative and qualitative components of the study.
- Conduct a cross-sectional household survey in 2,400 households across 3 districts.
- Carry out patient exit interviews, health facility register data extraction, and a survey and focus group discussions/interviews with providers at approximately 45 health facilities.
- Complete a cross-sectional survey with CHWs (about 12-38 CHW in each of the 3 districts).
- Conduct approximately 37 focus group discussions with community members.
- Manage and appropriately store the qualitative and quantitative data collected.
- Transcribe and translate qualitative interviews and focus group discussions where languages employed require it.
- Conduct coding and analysis of the quantitative and qualitative data.
- Participate in the synthesis of findings to develop an assessment framework of barriers to appropriate case management of febrile illness that influence care seeking and are amenable to intervention at the community and health facility levels.
- Support the dissemination of results in-country through workshops and presentations with key stakeholders.
- Contribute to the writing of a draft and final report.
- Co-author manuscripts to disseminate the research findings.

#### B. Deliverables:

- Feedback on research protocol and data collection tools
- Approval of national research ethics institutions and other required approvals to conduct proposed activities.
- Dataset to inform selection of households, health facilities, and community members.
- Datasets from data collection including transcriptions and translations of in-depth interviews with health facility providers and focus groups with community members, completed cross-sectional household survey and health facility provider survey questionnaires, patient exit interviews, and data extracted from health facility registers.
- Assessment framework of barriers to care-seeking for febrile illness.
- Draft report summarizing the methods, findings, and conclusions.
- Final report addressing feedback provided by technical reviewers.
- Summary of completed dissemination activities.
- Inputs to the manuscript.

### **Information Requested**

PATH requests that interested organizations send a brief response (must be a maximum of 10

pages total) with answers to the following questions/requests for information:

1. Based on the preparation necessary for implementation – including finalizing study design, ethics approval, recruitment of data collectors, etc. – is the proposed study design described in the Scope of Work section feasible within the given time frame (September 2022-November 2022)?
2. Based on your understanding of the study design described in the Scope of Work section, is the current study design feasible within a budget envelope of USD \$250,000?
3. If not, what modifications to the study design would your institution propose to the study design/scope of work to fit within the budget envelope while addressing the objectives and sub-objectives of the study?
4. What relevant institutional capabilities does your institution possess that would allow you to execute the proposed Scope of Work? Please describe relevant previous work as well as your institution's proposed research team, showcasing your current or previous expertise in this field. This information should include: the size of the proposed team, each member's relevant skills and experience, and proposed level of effort for each member of the team.