

FOURTH MEETING OF THE MALARIA TECHNICAL ADVISORY GROUP (MALARIA TAG) TO THE PAN AMERICAN HEALTH ORGANIZATION (PAHO)

Summary

The fourth meeting of the Malaria Technical Advisory Group (Malaria TAG) was convened on May 29-31, 2019 at PAHO Headquarters in Washington DC to review the progress of key malaria efforts carried out by the Pan American Health Organization Regional Malaria Program, discuss key technical issues, and provide recommendations where appropriate.

The meeting included 11 sessions and discussed the following topics: (1) 2017 Malaria TAG Meeting recommendations and review of the agenda; (2) Report from the Regional Malaria Program with updates on the malaria situation in the Region; (3) Regional Malaria Elimination Initiative (RMEI) or Iniciativa Regional de Eliminación de la Malaria (IREM); (4) Municipalities for Zero Malaria; (5) Antimalarial Drug Efficacy and Resistance; (6) Framework for the Elimination of *P. falciparum* in South America; (7) Mass Drug Administration for *Plasmodium vivax*; (8) Manual for Malaria Risk Stratification and Elimination of Foci of Transmission; (9) Situation of Operational Research for Tafenoquine and G6PDd testing; (10) Regional Guidance on the Implementation of WHO-recommended total double primaquine dose over 14 days for radical treatment in *P. vivax* endemic countries to prevent relapses; and (11) Malaria research agenda in the context of policy development.

Main Recommendations

The key outcomes / main recommendations of the Malaria TAG to PAHO are as follows:

- The Malaria TAG recommends renewed attention to malaria mortality, which has significantly
 increased in some countries. Reinforced and targeted actions in high burden areas or
 municipalities are likewise recommended particularly by taking inspiration and lessons from
 countries in the Region that have effectively addressed their respective malaria challenge,
 improving access to prompt and quality treatment of both uncomplicated and complicated
 malaria, and increasing coverage in both long-lasting insecticidal nets (LLIN) and indoor residual
 spraying (IRS).
- Recognizing the potential important contribution that RMEI can have on malaria elimination
 within Mesoamerica and the Dominican Republic, the Malaria TAG recommends further
 consideration of several relevant issues to enable optimal achievement of targets and desired
 impact. These include the issues of *P. vivax* relapses, in-country capacity building in monitoring
 and evaluation, addressing of various health workforce challenges, better understanding of the
 dynamics of transmission at the local level, consideration of previous lessons learned in related
 initiatives, and better insightful analysis of the financial incentive model.
- The Malaria TAG affirms the importance and welcomes the launch of the Municipalities for Zero Malaria and the reorientation of the annual Malaria Champions of the Americas Award as the platform for recognition of successful work in high burden municipalities (HBMs). The Malaria TAG recommends the engagement and involvement of national programs and alignment with national malaria plans; working towards "real time" monitoring of progress and key indicators; and promoting healthy competition as well as a spirit of cooperation among participating municipalities.



- The TAG recognizes the continuing importance of monitoring antimalarial drug efficacy and resistance in the Region and recommends corresponding actions to address challenges of *P. falciparum* transmission in mining areas, including issues related to circulating counterfeit drugs; implementing strategic activities to monitor the situation in Bolivar State in Venezuela; addressing methodological issues pertaining to difficulties in performing full therapeutic efficacy studies (TES), deploying control measures and considering inclusion of studies regarding *P. vivax* resistance.
- The TAG does not recommend differentiated actions aimed at eliminating *P. falciparum* malaria in territories with concomitant transmission of *P. vivax* malaria but emphasizes the importance of PAHO encouraging countries to take decisive actions to prevent the re-establishment of *P. falciparum* transmission at subnational levels where it had been interrupted despite ongoing *P. vivax* transmission. In the same way, subnational elimination verification processes specific for *P. falciparum* are not recommended.
- Considering that some countries have used mass drug administration (MDA) for *P. vivax* in the setting where there are no current policy recommendations for this intervention in the Region, the Malaria TAG specifies that it is crucial for PAHO to engage proactively with these countries to provide the best possible advice and guidance on how to collect high-quality and useful data in a systematic and rigorous fashion to build evidence to inform policy recommendations for a variety of MDA use cases. This engagement by PAHO should, however, not be construed as an endorsement of MDA for *P. vivax*, but rather as an effort to support countries in a collaborative effort to address the evidence gaps to inform robust policy recommendations.
- The Malaria TAG considered that "Manual for Malaria Risk Stratification and Elimination of Foci of Transmission" to be a complete document and recognized the approach of the stratification as a tool to organize the national and local response to the disease, with clearly defined actions for detection, diagnosis, treatment, case investigation, reactive case detection and vector control. The TAG believes that the content of the manual is adequate for well-trained people, such as the staff at national level, but not necessarily for all the personnel at local level. Therefore, the TAG recommends developing a simplified version that is more suitable for use of operational personnel.
- The TAG affirmed the PAHO/WHO position on both (G6PD test and Tafenoquine) regarding evidence needed and next steps to proceed according with WHO evidence review and policy processes.
- Considering the importance of relapses by *P. vivax*, the Malaria TAG recognizes the efforts made by CDC and local investigators in Brazil with USAID and PAHO support, to carry out a Randomized Control Trial (RCT) of "high-dose" vs. "low-dose" primaquine (PQ) for radical cure of vivax malaria. The Malaria TAG believed that it is premature to issue recommendations regarding high-dose PQ before the final analyses of this study are completed and accepted for publication. In line with WHO recommendations, the TAG emphasized the importance of performing a risk benefit assessment at population level when deciding on the use of primaquine in situations where G6PDd testing is not available.
- The Malaria TAG acknowledged the important work that has been done and facilitated by PAHO to consolidate a malaria research agenda for the Region and recommends PAHO continue to develop a complete set of priority topics based on actual problems in the countries (and not necessarily driven by policy priorities); giving attention to the inclusion of other key topics while recognizing that the list will remain dynamic; and finding ways to leverage and connect with



policy process within the countries, across the Region, and globally through mechanisms being set up by WHO.

Specific Outcomes / Recommendations Arising from the Malaria TAG Sessions

2017 Malaria TAG Meeting recommendations and review of the agenda

• The Malaria TAG agreed that the document presented properly summarized the discussions in the third meeting.

Report from the Regional Malaria Program with updates on the malaria situation in the Region

- The Malaria TAG acknowledged the certification of malaria elimination in Paraguay and Argentina in 2018 and 2019 respectively because of the hard work of the governments and malaria staff of both countries.
- Similarly, El Salvador was noted to be on its third year without an indigenous malaria case, despite challenges on migrant populations, accomplished through targeted elimination efforts as well as health system improvements
- Marked reduction in cases were likewise noted in Honduras and Haiti although there had been substantial increases in Venezuela, Nicaragua, Brazil, Panama, Peru as well as in Costa Rica and Dominican Republic.
- After registering its lowest number of cases during the past 40 years in 2014, the Region of the Americas have experienced an overall increase in cases.
- The Malaria TAG noted that the official cases reported in Venezuela have indeed increased but seem to have not considered relapses. There is also concern on the high number of malaria related deaths (2016-2018) in the country.
- The noted substantial decrease in cases in Haiti was acknowledged by the Malaria TAG who expressed interest in determining the role of recent MDA pilot activities and other interventions that may have contributed to it. While the reduction in the Departments of Grand Anse and Sud were quite pronounced, there is concern on the relatively pervasive, albeit low endemic situation in the Ouest Department.
- While monitoring malaria cases and aggressively pursuing corresponding reductions and subsequent elimination is very important, the Malaria TAG recommends renewed attention to malaria mortality that has significantly increased, particularly in Venezuela; as well as on the role and importance of improving coverage in both LLIN and IRS in high burden countries.
- The Malaria TAG further recommends reinforced and targeted actions in high transmission areas, perhaps by taking inspiration and lessons learned from countries like Suriname, which has effectively addressed its malaria challenge, particularly among the mining population.

Regional Malaria Elimination Initiative (RMEI) or Iniciativa Regional de Eliminación de la Malaria (IREM)

With the goal of achieving zero malaria cases, eliminating the autochthonous transmission, and reinforcing health systems towards subsequently preventing the re-establishment of the disease in ten countries in Mesoamerica the Dominican Republic and Colombia, the Regional Malaria Elimination Initiative (RMEI) has been launched with support of approximately USD 53 million from the Bill and



Melinda Gates Foundation, Global Fund, and Carlos Slim Foundation. The Inter-American Development Bank serves as the administrator of the Initiative.

RMEI is aligned with the Mesoamerican Health Initiative under a collective impact scheme with a resultsbased financing model that includes a performance incentive scheme based in a set of ten performance indicators. The Initiative began in January 2018 with corresponding investments on, DTI-R (Diagnosis, Treatment, Investigation and Response), surveillance, vector control and microplanning.

- The Malaria TAG recognizes the potential important contribution that IREM can have on malaria elimination within the sub-region and among the countries that it covers. However, the following issues are recommended for further consideration:
 - Importance of better understanding relapses given that majority of countries covered by IREM are primarily affected by *P. vivax;*
 - Importance of reinforcing the monitoring capacities of the programs themselves so that they can continue the exercise by themselves beyond the duration of the Initiative;
 - Potential contextual differences in monitoring and assessment processes among countries particularly in rural areas;
 - Possibility of developing a monitoring network for appropriate information sharing;
 - Contributions to a stable and relevant health workforce and resolution of personnel issues (e.g. better trained entomologists, contracting of workers; multiple roles and responsibilities, etc.);
 - Better understanding of the dynamics of transmission, including in Nicaragua which seems to have a considerable proportion of cases (approximately 30%) among children and pregnant women;
 - o Need to ensure that investments trickle down to the affected communities;
 - Need to consider previous lessons learned from related efforts and ensure that mistakes are avoided;
 - Need for more / convincing data, including support for the effectiveness of the "financial incentive model".

Municipalities for Zero Malaria

After noting that a significant proportion of malaria in the Region of the Americas is primarily concentrated in a relatively few municipalities within the countries during the November 2018 "Consultation Meeting on Addressing Malaria in High-burden Municipalities", and with affirmation from participating countries and partners that there is a need for a movement to aggressively address the situation, PAHO launched on April 25th, on the occasion of World Malaria Day, the "Municipalities for Zero Malaria" Initiative.

"Municipalities for Zero Malaria" will focus on bringing together key partner organizations, relevant government agencies, and municipalities affected by malaria to support local efforts to take effective action against the disease. Beginning 2019, the Malaria Champions of the Americas platform, which honors best practices towards overcoming the challenges of malaria, will serve as a key platform for the promotion of the new initiative.

• The Malaria TAG took note of the new initiative, its inception during the November 2018 meeting addressing malaria in high burden municipalities (HBM) and recent launch during the 2019 World Malaria Day and affirmed that the initiative was a very good idea, including the



reorientation of the annual Malaria Champions of the Americas Award as the platform for recognition of successful work in HBMs.

- To further contribute and facilitate the successful implementation of the Initiative, the Malaria TAG recommends the following:
 - Ensure the engagement and involvement of national programs and corresponding national authorities in the process so as not to bypass national leadership; this would be detrimental for PAHO and the progress of efforts in the HBMs;
 - Ensure that collaborative work and support among participating HBMs are strongly aligned with the corresponding national malaria plans of countries;
 - Clarify the strategic approach / microplanning process in tailoring interventions in each municipality;
 - Clarify the operational definition of HBMs and address the issue of proportions (e.g. many places are high burden because they have a lot of people; but what about the places that have a high burden but may not have that many people?);
 - Importance of working towards "real time" monitoring of progress and key indicators among the HBMs compared to the general surveillance reporting;
 - Consider working not just in HBMs but eventually in different epidemiological contexts;
 - Need to create not just healthy competition but also a spirit of cooperation among participating municipalities;
 - Facilitate strong community engagement towards bringing communities into the fold and establishing responsibility to get them to reduce malaria in their communities;
 - Importance of strategic advocacy to facilitate corresponding support from national and local governments given that politics can affect resource allocation and support to HBMs.

Antimalarial Drug Efficacy and Resistance surveillance

PAHO team provided updates on the latest results of antimalarial drug efficacy and resistance surveillance activities in the Region. There continues to be no evidence of ACT resistance in the Americas. Since 2010, the presence of pfK13 C580Y is only in Guyana and is neither associated with delayed clearance nor treatment failure. The last time the mutation was identified was in 2017 and none was detected among samples analyzed as part of the latest TES. Presence of pfK13 C580Y is a de novo mutation and did not spread from GMS. K13 mutations associated with resistance (C580Y or others) were not detected in other countries in the Region of the Americas, and two recent therapeutic efficacy studies (TES) conducted in Guyana and Colombia confirms absence of therapeutic failure to Artemether-Lumefantrine.

There remains no evidence of Chloroquine resistance markers in Central America and Hispaniola Island, based on molecular markers surveillance specifically for *pfcrt*. Therapeutic failure to Chloroquine in *P. vivax* malaria exists in the Region but remain at very low levels.

- Recognizing the importance of the updates presented regarding antimalarial drug efficacy and resistance surveillance in the Region, as well as various concerns discussed, the Malaria TAG recommends the following:
 - Address evolving situation of *P. falciparum* transmission in mining areas, including issues related to circulating counterfeit drugs;
 - Implement strategic activities to monitor the situation in Bolivar Sate in Venezuela;



- Address methodological issues such as those pertaining to sample size, increasingly long duration of studies, difficulties in performing full TES studies in certain areas, cost, difficulties in doing long term testing and follow-up with gold miners, among others;
- In this regard the need to establish a strategic approach for selecting and monitoring high risk foci to identify and study situations of suspected resistance more proactively;
- Consider more active promotion of studies regarding *P. vivax* resistance and the approach of methodological issues in *P. vivax* studies (duration of follow up, testing CQ alone, etc);
- Improve capacity building for antimalarial drug efficacy and resistance surveillance;
- Implementation of the Framework for artemisinin resistance containment and elimination in South America –Guyana Shield.

Framework for the Elimination of P. falciparum in South America

- Noting the background information given on the feasibility of interrupting *P. falciparum* transmission at the subnational level and the need to sustain surveillance to prevent its reestablishment, the Malaria TAG acknowledges that eliminating *P. falciparum* first is a natural progress in malaria elimination and usually happens years before *P. vivax* elimination. Moreover, *P. falciparum* transmission is usually associated with deficiencies or failure in providing standard malaria interventions.
- Many municipalities in the Americas have interrupted or come very close to interrupting *P. falciparum* transmission but then had resurgences owing to decreased or interruption in interventions.
- A Framework for the elimination of *P. falciparum* in South America could stimulate countries towards the goal of malaria elimination recognizing efforts in reaching this important milestone; and builds on the existing framework for artemisinin resistance prevention, containment, and elimination in South America.
- This is especially relevant as although there is currently no evidence of resistance to ACT in the Americas, the situation of malaria transmission in gold miners, circulation of possible counterfeit ACTs, and irregular intake of treatment are regarded as serious risks that can contribute in the emergence of ACT resistance.
- Moreover, addressing *P. falciparum* elimination will decrease autochthonous malaria mortality, even though deaths in imported cases will continue to pose a challenge. Already, *P. falciparum* elimination is an intermediate goal in Peru, Brazil and Bolivia in South America.
- However, there are concerns that having different guidance to address the response to *P. vivax* and *P. falciparum* cases could be counter-productive and confusing at local level. Although efforts to eliminate *P. falciparum* will impact vivax transmission, balancing the distribution of efforts and resources for *P. falciparum* malaria elimination while the *P. vivax* burden is huge at local level is also concerning.
- The TAG considers that *P. falciparum* elimination should be pertinent as a national milestone as part of the larger goal of elimination of malaria. Strategies thus should be targeted towards total malaria reduction although *P. falciparum* malaria burden should be considered as one of the key parameters for prioritizing when selecting target populations for malaria interventions.
- In subnational areas that maintain transmission of *P. vivax*, but where *P. falciparum* transmission has been interrupted, PAHO should guide and encourage countries to actively implement specific interventions to prevent reestablishment of transmission due to that species.
- Prevention of re-establishment of transmission by *P. falciparum* at subnational levels should be based on set of actions recommended by WHO for prevention of re-establishment of malaria.



- Monitoring the re-establishment of *P. falciparum* at subnational level should include operational assessments on the health system capabilities to detect and response to a *P. falciparum* case or outbreak.
- A subnational elimination verification process, specific for *P. falciparum* is not recommended because, although useful as a temporary achievement, it could impair political commitment for the longer task of eliminating malaria. Similarly, because its potential complexity, the process could divert resources away from total malaria elimination efforts.

Mass Drug Administration for Plasmodium vivax

- MDA for *P. vivax* has been conducted in some countries in the Region of the Americas without consultation, engagement, or technical input from PAHO, and in the setting where there are no current policy recommendations for this intervention in the Region. The lack of a policy recommendation for MDA for *P. vivax* is due to a lack of evidence, rather than data suggesting it would not be useful.
- Given that countries have used MDA for *P. vivax* in certain situations, it is crucial for PAHO to engage proactively with these countries to provide the best possible advice and guidance on how to collect high-quality and useful data in a systematic and rigorous fashion to build an evidence base for to inform policy recommendations for a variety of use cases.
- This engagement by PAHO should not be construed as an endorsement of MDA for *P. vivax*, but rather as an effort to support countries in a collaborative effort to address the evidence gaps so that a robust policy recommendation can be made.
- Data for policy consideration could be collected through a variety of means including operational research studies (with potential funding noted from the RMEI), rigorous and systematic collection of observational data during program implementation, and thorough retrospective analysis of available published and unpublished data. When possible, collection of data from control or comparison groups not receiving the MDA would be useful.
- PAHO should emphasize that if MDA is to be used, it should be considered as a time-limited potentially useful tool delivered in the context of a package of interventions including high coverage with vector control, case management, community engagement and surveillance.
- PAHO should convene a technical group including experts from countries where MDA for *P. vivax* is currently being considered to develop guidance for data collection for different *P. vivax* MDA use cases (e.g. epidemics, outbreaks, and elimination scenarios), geographical settings, antimalarial drug regimens, cost and cost effectiveness, safety, research priorities, and other key technical issues.
- Some other issues raised: need to have clarity about the endpoint (control or elimination) for measuring MDA contribution; stress importance to reach MDA high coverage; need for pharmacovigilance specially in remote settings; specify target groups for MDA; address challenges of MDA in mobile populations where it may be difficult to generate enough evidence.

Manual for Malaria Risk Stratification and Elimination of Foci of Transmission

• The Malaria TAG reviewed and noted the information related to the draft "Manual for Malaria Risk Stratification and Elimination of Foci of Transmission" developed by the technical team of PAHO. The document is in its final phase of review, is in process of being rolled out, and used some countries in the context of the Regional Malaria Elimination Initiative (RMEI).



- Based on the DTI-R strategy and the concept of epidemiological surveillance of malaria as an intervention, its purpose is to guide the process of moving from control to elimination through the identification and characterization of the foci of the disease, developing a micro-stratification and micro-planning in each of these areas.
- The members of the TAG considered the document to be complete, and congratulated the PAHO team for the effort in its development. Likewise, it recognizes that stratification is a useful tool to organize national and local malaria programming, with clearly defined actions for detection, diagnosis, treatment, investigation, response and vector control activities.
- Some weaknesses were raised with regards to the schematic representation of the DTI-R as strategy, recommending to clarify the role of vector control measures as a preventive and continuous control activity, and not only as a response to a case.
- The TAG believes that the content of the manual is adequate for well-trained people, such as the staff at national level, but not necessarily for all the personnel at local level. Therefore, the TAG recommends developing a complementary pocket manual, shorter and simpler to be used by operational personal at local level.

Situation of Operational Research for Tafenoquine (TQ) and G6PDd testing

MMV and PATH were invited to present updates regarding operational research in the Region of the Americas, the status of the registration of Tafenoquine in various countries (approval is expected soon in Brazil, Guatemala, Peru, and Colombia) and the hospital-based outpatient treatment study in Brazil to evaluate the feasibility of large-scale treatment of *P. vivax* with Tafenoquine.

Updates regarding the Biosensor point of care rapid test apparatus for quantitative G6PD measurement was likewise presented including information that WHO is in the process of considering prequalification for the test.

• The TAG welcomed the updates regarding Tafenoquine (TQ) and the G6PDd point of care testing in the Region and affirmed the PAHO/WHO position on both (G6PD test and Tafenoquine) regarding the required next steps to WHO evidence review and policy processes.

<u>Regional Guidance on the Implementation of WHO-recommended total double primaquine (PQ) dose</u> over 14 days for radical treatment in *P. vivax* endemic countries to prevent relapses

- Overall, the TAG members agree that relapses are probable to be a key contributor to ongoing *P. vivax* transmission in the Americas despite the widespread use of radical cure with "low-dose" primaquine (PQ; 0.25mg/kg for 14 days or 0.5mg/kg for 7 days). Evaluating the effectiveness and safety of "high-dose" regimens (0.5 mg/kg for 14 days) in the Region is needed, as both first line and second line treatment regimen.
- TAG members emphasized how little is currently known about relapse rates and putative PQ "tolerance" or true resistance in the Region. Relapse rates seem to differ across countries (lower rates in Central America compared with high rates in some South American countries), but ways of defining relapses (and distinguishing them from new infections) vary among available published studies and in surveillance systems across countries.
- Other factors that may decrease PQ efficiency (besides true resistance), such as drug quality and pharmacogenomic features (e.g. CYP2D6 genotypes) remain poorly characterized in the region.



- Safety of "high-dose" PQ regimens and the need for previous G6PD deficiency screening when using these regimens were raised as important knowledge gaps. TAG and observers praised the efforts made by local investigators in Brazil and CDC, supported by USAID and PAHO, to carry out a randomized control trial (RCT) of high-dose vs. low-dose PQ for radical cure of vivax malaria. Preliminary results showing that high-dose PQ may significantly reduce recurrence risk over 24 weeks of follow-up are promising and when final results are available, should be taken into consideration when defining *P. vivax* treatment policies in the Region.
- However, TAG members agreed that it might be premature to issue recommendations regarding "high-dose" PQ before the final analyses of this study are completed and accepted for publication.
- Understanding the importance of relapses of *P. vivax* in the Region, the TAG considers that it is important to promote other clinical efficacy studies of the use of primaquine in doses greater than 3.5mg /kg (total dose). Moreover, issues regarding the relative contribution of relapses and new infections to recurrences in endemic sites like Cruzeiro do Sul indicate the need for similar RCTs with treated patients being followed up in malaria free settings to avoid the risk of reinfection. Similarly, the risks and barriers related to a possible increase in the dose of primaquine should be analyzed because of the epidemiological gains of increasing the dose. Modeling was suggested as a strategy to estimate the relative contribution of relapses to overall *P. vivax* transmission in different endemic settings.
- As recommended by WHO, the G6PD status of patients should be used to guide the administration of primaquine double dose for 14 days. When G6PD status is unknown and G6PD testing is not available, a decision must be based on an assessment of the risks and benefits¹.

Malaria research agenda in the context of policy development

The Region of the Americas embarked on the process of developing a malaria research agenda that complements the 2011 Malaria Eradication Research Agenda (MalERA) to primarily address malaria research needs among its countries that were otherwise not prioritized globally.

The comprehensive process outlined key research gaps in the Region; but given that the orientation was that of malaria control, the publication of the resulting manuscript was subsequently deferred with the intent of revising it from the perspective of the Region's new commitment to malaria elimination as reflected in Region's Plan of Action for Malaria Elimination 2016-2020

- The Malaria TAG acknowledged the important work that has been done and facilitated so far by PAHO to consolidate a malaria research agenda for the Region that emphasizes the key role of research in malaria prevention, control, elimination and prevention of re-establishment.
 - However, members of the TAG have expressed concerns on the following:
 - The need for and funding implications for the proposed ad hoc committee on malaria research;
 - Prioritization of research topics given that it is impossible to represent and prioritize concerns of all stakeholders;

¹ Risk–benefit assessment: depending on the population prevalence of G6PD deficiency, the severity of the prevalent genotypes and the capacity of and accessibility to health services in which primaquine-induced haemolytic anaemia can be identified and managed.



- Exclusion of key topics such as insecticide resistance, socio-political dimensions and determinants, and relevant health systems issues;
- Funding implications;
- Importance not just of the priority topics but reinforcing research capacities, including supervision and publication of research results from Latin American countries;
- Making policy as the driver of research vs. research as the driver of policy;
- Recognize different types of research, such as research that reflects local views of how actions/efforts impact malaria and health – this is to open the way for more players and innovation (out of the box research).
- The Malaria TAG likewise recognized important inputs from the meeting observers which were noted as follows:
 - Enormous value of discussions and recommendations of the TAG to funding agencies as they guide investments to move policy and programming ahead;
 - Availability of support from the Global Fund for operational research;
 - Plans of the WHO Malaria Policy Advisory Committee (MPAC) to establish mechanisms to suggest topics that are of key importance to countries.
- Given the discussions, the Malaria TAG recommends to continue working with PAHO to develop
 a more complete set of priority topics based on actual problems in the countries (and not
 necessarily driven by policy priorities); giving attention to the inclusion of other key topics yet
 recognizing that the list will remain dynamic; and finding ways to leverage and connect with policy
 process with in the countries, across the Region, and globally through mechanisms being set up
 by WHO.