

**RBM Partnership  
Malaria in Pregnancy Working Group  
Twenty-third Annual Meeting  
Geneva, Switzerland  
September 12 & 13, 2023  
Meeting Report**

***Strengthening partnerships to close the gaps in MiP***

Meeting Objectives:

- Discuss opportunities to prioritize MiP as part of the broader ANC platform
- Share, disseminate and discuss new MiP research and innovations with implications for MiP programming
- Disseminate learning from country experiences in improving coverage of MiP interventions
- Develop WG action plan for 2024

## Day 1:

### Opening remarks:



*“No woman should die from MiP. Ending malaria is very possible. It will need to be innovative and it will need us to be working multi-sectorally. I challenge us to dare to dream of a day when no woman, no child will die of malaria. We are at a crossroads of getting it right. Malaria can be the entry point to health and community systems strengthening. It is possible. Let’s dare to dream. And let’s continue the fight.”*

**Dr. Michael Charles, RBM CEO**

*“WHO expectations are:*

- *Supporting dissemination and implementation of new WHO guidance on MiP*
- *Support countries to achieve increased coverage of IPTp to protect mothers and their babies*
- *Strengthen existing and build new partnerships including strong involvement of national malaria programs and other programs*

*We look forward to the outcome of this meeting in view of strengthening partnerships to reach common goals and to support countries in the fight against malaria in pregnancy.”*

**Dr. Daniel Ngamije, WHO GMP Director**



## **Broader support of the ANC platform**

1a. Accelerating a Gender-Transformative Approach to Malaria in Pregnancy Advocacy, Deborah Atobrah, CEGENSA, University of Ghana

- It is important to employ gender-transformative approaches to MiP interventions. The fact of working with women does not automatically mean gender intentionality is being employed.
- Advocacy is one of the key avenues for accelerating a gender-equitable approach to eradicating MiP in a sustainable and transformative way.
- The Advocacy Agenda for Gender-responsive MiP intervention should observe the following priorities:
  - Accelerating gender-balanced representation in MiP leadership, focused on strengthening the political will for gender-balanced representation in MiP leadership among policymakers, researchers, scientists, and workforce.
  - Deploy gender and malaria (MiP) champions strategically positioned to support and influence decision-making partnership with government agencies, relevant organizations, and communities.
  - Gender considerations in malaria research & development should be nuanced to make considerations for heterogeneity, paying attention to the unique conditions of pregnant and lactating women.
  - Tailor malaria prevention, education, diagnosis, and treatment programs to local gender dynamics for pregnant women.
  - Create pathways for gender-equitable participation and professional advancement for the malaria workforce, including community healthcare workers. This should include building skills and capacity of community health workers and clinic staff on country-specific gender-sensitive strategies and policies for MiP prevention and treatment.

### Discussion:

Q: What do you think about the payment of CHWs?

- It's about the work. They need to be compensated for the work they are doing. It goes back to the issue of people working on women's health being undercompensated, undervalued.
- Whoever is involved in this work ought to be paid. It's an intersection of gender and class. Many women working in communities do not have high levels of education and they are less empowered and it is unfair to ask them to work for no or low wages. Some governments think it should be a labor of love, but economies are very tough in traditional societies so they need to be adequately compensated.

Q: How have countries begun to address, support CHW payments?

- Rwanda experience: Depends on cycles of funding to support malaria campaigns. Started reflection about how to start a regime of predictable enumeration. Even at \$10/month it was beyond what the country could manage. The reform was to reduce the number of CHWs so that they have 2 CHWs per 100 households. They also worked to increase their knowledge, trained them on more interventions and worked with partners who are willing to fund it and incentivize the CHWs. A voucher could be provided for men to accompany women to ANC – this is done for PMTCT and could work for IPTp to eliminate men as a barrier to ANC services.
- How can we change the cultural paradigm in which the women take care of the home and the men provide the means?
  - If we compensate very well, there is research shows that when the value of a sector goes up, then more men will go into it. At the institutional level, adequate opportunities and career advancement will help to encourage women.
  - This is where we look at gender approaches to working in malaria.

1b. Listening to women's voices: A client-centered approach to preventing malaria in pregnancy through ANC, Elizabeth Arlotti-Parish, Jhpiego

1. What is this gender thing anyway?
  - a. Gender: Roles, responsibilities, rights, obligations, expectations and power relations associated with being female or male. These gender considerations are different with context and time, and can change over time.
  - b. [Gender Integration continuum](#):
    - i. *Gender blind* programs assume people of different genders face the same challenges and opportunities. When we do consider gender this is called being *gender aware*.
    - ii. Gender aware programs fall along a continuum of Gender Exploitative—Gender Accommodating—Gender Transformative
    - iii. Gender exploitative: reinforcing negative gender norms and power imbalances
    - iv. Gender accommodating: working within existing gender norms
    - v. Gender transformative: working to change gender norms towards more equal roles and relationships between people of different genders
    - vi. Example: *Accommodating*: A project acknowledges that men have decision-making power in the household, so wants to encourage them to attend ANC with their wives. *Exploitative*: The project decides to prioritize couples who come together to be seen first, while women who come alone have to wait. This reinforces the norm that a man's time is more important than a woman's time, and discourages women who come alone (who may not have partners, or whose partners may be abusive, etc). *Transformative*: The project invites couples to attend community group sessions that meet separately and later together, to discuss ANC as well as gender norms and couples' communication.
2. Gender considerations for MiP service uptake
  - a. Barriers to early ANC uptake: Women are not main decision-makers about their own health, nor do they control resources (for transport and other payments). Husbands may delay the first visit so they do not have to pay for too many trips to the clinic
  - b. Women seek traditional care due to pressure from mothers-in-law, or because they know that traditional providers will be available and will not judge them for attending late. Availability is a gender issue due to women's multiple burdens on their time. Provider behavior is a gender issue because there is a power differential between woman and provider (even female providers) that may not exist if the client were male
  - c. IPTp: Women do not like the taste/side effects, and providers do not take this concern seriously. Women also feel DOT to be coercive, and seems to take away their free will.
  - d. How to address these issues: Engage decision-makers in a way that does not reinforce power imbalances, consider alternative service modalities (different service hours, outreach), training (for providers and supervisors) on interpersonal communication and respectful care
3. Gender considerations for MiP service delivery
  - a. Social, mobility, educational barriers to women as providers, including CHWs in much of West Africa

- b. Female providers' productive, reproductive, and community roles inhibit professional advancement
- c. Even when cadres are predominantly women, decision-makers are predominantly men. This makes it hard for women to implement new protocols once they have been trained. Incidents of sexual harassment and abuse within the work environment lead to absenteeism and poor quality of care.
- d. How to address these issues: Advocate for policy changes to facilitate recruitment of female providers, change training modalities (e.g. low-dose-high-frequency) and plan for trainee needs (e.g. budget for nannies for female participants with small children), include safeguarding as part of all provider trainings

Discussion:

We need to begin to see these conversations in terms of strategies being rolled out and need to also be thinking about how to engage men.

- Q: All of these changes would lead to better programming and the resulting IPTp/ANC coverage, but countries right now are having a hard time ensuring they have SP available. Do you have any sort of low cost guidance which can help countries implement some of these changes without the associated costs because these are the things that get cut out first?
  - Many strategies don't have an associated cost: Ex – training of NMCP in Mali: Can add a session on gender during review of national strategy for MiP. Adding content on gender to a training can be done for no additional cost.
- Q: Sexual harassment: Training on safeguarding is incorporated to every training, no matter what the content of the training is. Talking about how to deal with this and report it is very important. How do we get this incorporated?
  - Donors can lead the way by insisting that every training includes a session on safeguarding. It is the right thing to do but also has impacts on quality of service provision.
  - As we are thinking about our interventions, there are multi-pronged options. Communication, compassion and empathy are just as important as the clinical skills.
- Countries are thinking to revise their plans to include gender aspects. We could also go beyond training to revise supervision tools to see how we are addressing gender aspects at the facility level. What aspects should be included?
  - If supervisors are not prioritizing these skills then they fall to the wayside. Supervisors can be trained on gender issues, just like the health care providers. In addition, training supervisors on the role of gender in the supervisor process – what does the dynamic look like when the supervisor is male and the supervisee is female? – is important.

1c. PMI-S Gender Rapid Assessment, Strategy Development and Implementation, IniAbasi Nglass, MSH

- To have gender inclusive malaria interventions, 5 key areas are of great importance:
  - Programs (public and private sectors): Who is doing what at national and state levels? Opportunities to harmonize joint programming efforts, address gaps.
  - People: Key or potential gender champions to mobilize
  - Communications: Opportunities to harmonize and amplify messages
  - Cross-sectoral partnerships: Link with Gender teams, Community-based partners?
  - Measurement: How is this work being captured and used to inform decision making?

Discussion:

- Q: How much does the disaggregation disrupt the quality of the data? What impact is it having on the quality of your data? Every column to be completed by a CHW creates possibility of interrupting data quality.
  - Segregated data based on sex at a larger scale is difficult, but it is easier at the community level. Supervisors of the CHWs do the data analysis and capture the data on sex.
  - Issue of having sex aggregation at the community level is still a problem, but involving the supervisors to bring up the numbers reported is very helpful information and help to iron out the data quality issues.
- Q: If just do sex aggregation we may miss out on a lot. For example, some interventions may only be acceptable to women who are not pregnant. First and third trimester issues are very different. And these are things that may not be disclosed at the community level, but rather only at the facility level. Do you have any ideas of how to accommodate for this?
  - We haven't yet isolated complaints one by one regarding how it is associated with gestational age, for example. Demand creation partners have different stages of community approaches so they attend to pregnant women as a separate group, targeted with different demand creation messaging and different criteria for referrals to the health facilities. Analysis is based on malaria seasonality to look into what services are provided.

#### 1d. Maternal Health & Malaria: Opportunities for Collaboration and Integration, Meredith Mikulich, USAID

- Maternal and neonatal mortality have been stagnating since 2015
- Significant attention has been given to increasing rates of ANC-4 (and now ANC-8) attendance, but coverage is not sufficient without quality of care
- There are number of MH strategic priorities that lend themselves to collaboration with malaria programming, including:
  - Antenatal Care (ANC)
  - Respectful Maternity Care (RMC)
  - Anemia, Postpartum Hemorrhage (PPH), Safe Blood
  - Systems of Care

#### Discussion:

- The intersection of anemia and malaria is very important. The guidance on folic acid (update soon to come) is: WHO recommends using folic acid and iron supplementation in combination with SP.
  - Studies on IPTp suggest that the level of supplementation should be sufficient. This is an area that needs more studies.
  - Most studies have excluded women with severe anemia, but low dose folic acid is actually the recommended dose.
- This presentation underscores the reality in the women's journey. MiP is just one piece of a bigger, more complex reality for pregnant women. We need more MH colleagues at the table. If we only go forward with this one piece and it is siloed we won't be able to meet the needs of women.

#### **ANC Policy & Practice**

2a. Optimizing scaleup of Group ANC as a strategic tool in improving standard and coverage of care in 104 facilities on MiP and ANC retention in Nasarawa State, Nigeria, Eberchukwu Ede, Jhpiego

- Introduction of G-ANC was temporally associated with increases in coverage for both antenatal care visits and IPTp-SP at facility level
- Real world” implementation of Group ANC of a model of care consistent with positive trends across scale-up phases
- Further scale-up of G-ANC should be considered as a feasible strategy to improve uptake of other evidence-based preventive interventions in pregnancy.
- Scale group ANC to more states and facilities to increase coverage.
- Modify model to suit lower volume facilities.
- State to improve availability of SP with new efforts to minimize stockout
- Leverage group ANC platform to strengthen prevention, screening, and treatment of other infections, such as syphilis, HIV, etc

Discussion:

We need to be looking at things to improve ANC coverage.

Stockouts: Initial surges put pressure on SP stocks and a lot of advocacy was done through malaria TWGs to increase supply.

- Q: Did you have a list of criteria for grouping women?
  - Women were grouped by gestational age.
- Q: Can group ANC go beyond the health facilities?
  - There is a lot of talk about community level group-ANC and this is being piloted in some areas.
  - Other forms are group PNC – post-natal care.

2b. Group ANC Results from Benin, Julie Gutman, CDC

- Group ANC is a novel service delivery model which incorporates clinical assessments, participatory learning, and peer support; we conducted a study in Benin to assess whether this model would improve uptake of both ANC and IPTp
- Overall, GANC uptake was much lower than desired; only 15.6% in the intervention arm
- There was no difference in uptake of ANC4 or IPTp3 between intervention and control arms at the cluster (i.e., health facility) level, possibly due to low participation in GANC.
- Individuals who participated in GANC had higher coverage of ANC4 and IPTp3 than those who attended standard ANC.
- Barriers at patient, provider, and system levels, including lack of available staff, length of meetings, and the need for a good reminder system for sessions, impacted enrollment, but those who participated found GANC to be a positive experience.
- Future analyses will assess barriers, facilitators, and system requirements to gain a more nuanced understanding of the feasibility and impact of GANC in Benin and provide guidance to improve success of potential future implementation.
- More broadly, consider eliminating fees for ANC at public sector health facilities to improve ANC uptake overall.

Discussion:

- Q: Did the study look at the age of participants in the cohorts?
  - Requirements included minimum of age as a requirement for consent. Depending on country, facility, you could look to see if it’s possible for adolescents to have a cohort. A lot of places only have 20-30 new ANC attendees a month. This study suggested that we need to think through the issues around G-ANC implementation for it to be successful, #1 being the number of women visiting the facility to be able to have the right size groups.

2c. Multi-country analysis of WHO Antenatal Care Policy on the Prevention of Malaria in Pregnancy, Bolanle Olapeju, Uniformed Sciences University

- WHO's 2016 ANC policy recommends eight or more antenatal care (ANC) visits
- Multi-national survey data since 2016 reveals persisting sub-optimal trends in ANC and suggests minimal impact of this policy on IPTp3
- The policy should be supplemented with clear guidance on how to improve ANC. This may include promising approaches such as group ANC, social and behavior change communication and health system strengthening.

Discussion:

- Q: How do we manage women not becoming overburdened by participating in G-ANC?
  - We need to do implementation research for designing an interactive package to encourage women to come get the ANC support, but one that does not interfere with their other responsibilities.
  - There are opportunities for us to come up with a bare minimum in terms of time and outline basic components for G-ANC to get a suite of services that adapts to the needs of women.
  - Typically, in a normal ANC environment, women are waiting for long periods of time, so having group sessions at a specific time for a specified session (example 90 minutes) could help to relieve this burden of time on women's day to day. Then the total amount of time would not be more than the combined time of a normal ANC visit plus the waiting period.
    - Need to look at efficiency – providing comprehensive services while allowing time for those relationships to develop.

2d. Equity of Antenatal Care Services, Atlantique, Benin & Geita, Tanzania, 2021-2022, Anna Munsey, CDC

- We compared ANC attendance and quality of care indicators under two different health financing structures
- The wealthiest, most educated women complete more ANC visits than the poorest, least educated, but women of all SES categories fall short of the recommended minimum number of visits in both areas.
  - In both locations, education is the most important factor in ANC attendance
- Gaps in quality of ANC care services were identified in both areas.
  - In Atlantique, Benin, where women pay a fee per visit, indicators are slightly higher and do not vary by SES
  - In Geita, Tanzania, indicators are lower and vary by SES
- Operational inequalities were also identified. Wealthier, more educated attendees have shorter waiting times in both locations.
- In Benin, reduction of user fees could reduce inequalities. In Tanzania, training and equipping healthcare staff could improve quality of care.

Discussion:

- Q: If there is a richer woman and a poorer woman who come to the facility, are you saying there is a difference in quality of care?
  - Yes, this was true for Tanzania.

**A Deeper Dive into C-IPTp Programming: Learning from countries & partners**

1a. Field guide (advance copy): Community deployment of intermittent preventive treatment of malaria in pregnancy with sulfadoxine-pyrimethamine, S. Schwarte, WHO

Discussion:

- Q: One exclusion criterion is HIV+ pregnant mother, but it is not listed in the criteria for those eligible for IPTp. It will be difficult for women to disclose this.
  - It is included in the exclusion criteria by stating those receiving sulfa-containing medicines should not get SP.
  - Countries that are piloting C-IPTp have dealt with this issue in their planning. In some cases, that's why some countries have required IPTp1 be given at the facility to try to identify and then track these women.
- Q: How will countries know it will be cost-effective for them to implement C-IPTp in one area vs another? There are so many interventions to choose from, but it is difficult to choose.
  - There is no hard line of coverage to know when it is best and most cost-efficient to do C-IPTp unfortunately.
  - The amount of cost depends on baseline of existing community level programs in a particular area and the existing level of effort for community level programming.
  - Countries with high IPTp coverage may still have pockets/areas where coverage is low where C-IPTp could be advantageous.
- Q: It seems that C-IPTp can result in no synergy between community and facility, including lower ANC attendance. How can these be mitigated?
  - We highlight that this should be a complimentary exercise to ANC, not supersede it.
    - ANC is still necessary for a full and comprehensive package.
    - C-IPTp is not instead of ANC. ANC is the mainstay.
  - The link is the maternal health card. Data systems allow the CHW and ANC provider to know if a woman is eligible or not and then can provide follow up as needed.
    - Monthly supervision visits by CHWs/health care providers are also key to maintaining that link.
- Q: When will the guide be available?
  - WHO is in the final stages of developing the field guide and then will share as a final publication.

3b. Traitement Préventif Intermittent Pendant La Grossesse au Niveau Communautaire (TPIg-c), Yacouba Nombre, MOH Burkina Faso

Discussion:

- Q: Quinine is still listed as the treatment for Pregnant women in the 1<sup>st</sup> trimester, but that is no longer the WHO guidance for 1<sup>st</sup> trimester. Why is quinine still used in Burkina Faso?
  - This needs to be discussed collectively within the Ministry of Health. We are aware of the guidance, but have not yet adopted the change.

3c. Nigeria's Story with C-IPTp: Implementation Learning, Emmanuel Shekerau, MOH Nigeria

Discussion:

- Q: Is there a difference between community delivery of service and health facility delivery?
  - Community service delivery is mainly promotive. They mainly provide preventive interventions - through iCCM they treat pneumonia, uncomplicated malaria, diarrhea and then refer serious cases. For C-IPTp they are referred to the health facility to get full comprehensive services.

3d. L'histoire du Bénin avec C-IPTp: Apprentissage de la mise en œuvre, Camille Houetohoussu, MOH Benin

3e. L'histoire de Madagascar avec TPI-c: Apprentissage de la mise en œuvre, Brune Estelle Ramiranirina, MOH Madagascar

Discussion:

- Q: WHO guidance is that C-IPTp should be done in areas where ANC is high and IPTp is low, but we see that from these country presentations that ANC is low and C-IPTp was successful. Is there chance that the guidance can be revised? Is there some nuance needed with the language in the field guide?
  - With TIPTOP in DRC and Madagascar the ANC4 increased, but in Mozambique and Nigeria it decreased a bit. This shows that it differs in different areas. Guidelines do not provide a threshold for ANC/IPTp coverage. It is a soft guidance specifying that there should be a strong ANC platform in place.
- Q: In Benin, do you give SP at the community level?
  - CHWs do not distribute medicine at the community level. It is the nurses who deliver the SP.
- Q: What feedback mechanisms are we putting in place in terms of getting feelings from communities we are serving and from the women receiving SP at their households?
  - An anthropological study was done during the TIPTOP project to test the acceptability of C-IPTp by health care providers, CHWs and pregnant women:  
<https://gh.bmj.com/content/7/11/e010079>
- Q: When you give the SP to the CHWs, what do they do with the expired drugs and is there a system to ensure they are not given to pregnant women? And how do you report drug reactions?
  - In Nigeria, the CHWs are linked to a health facility and the health providers (FEFO) Forced to Expire, Forced Out. CHWs are typically not given SP close to expiring since they get small amounts. Each month there is a report of data showing SP utilized that month and they are given a new supply based on consumption so there should not be excess SP not getting used in a timely way.
  - CHWs are trained to identify potential side effects of SP and the need to refer any pregnant woman experiencing a negative effect directly to a health facility where the event will then be reported.

3f. Update on QA SP commodities, Maud Majeres Lugand, MMV

3g. PMI's Procurement of SP, Susan Youll, PMI

3h. Global Fund Procurement of SP, Anne-Sophie Briand, The Global Fund

General Discussion:

- Q: Cost of hard tablets vs dispersible tablets. The taste can sometimes be an obstacle to women taking medicine. Is there any consideration to looking into this?
  - When countries do their budget exercises, they need to take the extra cost for dispersible tablets into account.
  - There are more manufacturers, thus more competition, so we hope we can do better on this.
  - There is low demand coming from countries on the dispersible tablets so the malaria team is not very actively promoting dispersible SP and there have been no requests

from countries. Perhaps they are not aware that it's available and the taste is better or perhaps it is a cost issue.

- Perhaps since these are new, the information needs to trickle down.
- You need to add the tablet to water so there needs to be a good source of water available.
- Q: Is the dispersible form more absorbable than non-dispersible?
  - No, because they have to demonstrate bio-equivalence.
- Q: Why is the move being made from blister packs to large tubs?
  - This is purely financial – the large tubs cost less than blister packs and procurers are often choosing the least expensive option.

### **Research Symposia: What's new in MiP**

4a. Protection from malaria after pre-conception PfSPZ Vaccine, Halimatou Diawara, Sara A. Healy, Alassane Dicko, Patrick E. Duffy, Sanaria

- PfSPZ Vaccine safety profile makes it appealing for use in pregnancy
- Pre-conception PfSPZ Vaccine was well-tolerated, with no fertility or pregnancy concerns
- Four-week PfSPZ Vaccine regimens (allowing rapid immunization) prevented Pf parasitemia and clinical malaria for two seasons without boosting
- Four-week PfSPZ Vaccine regimens prevented pregnancy malaria over nearly 2 years of follow up
- PfSPZ Vaccine efficacy requires presumptive antimalarial treatment before vaccination
- Pre-conception vaccination is a novel strategy to reduce the pregnancy malaria burden

4b. The development of PfSPZ vaccines for the prevention of pregnancy malaria, Thomas L. Ritchie, Stephen L. Hoffman, Sanaria

- *Plasmodium falciparum* (Pf) sporozoite (SPZ) vaccine platforms include radiation-attenuated PfSPZ (PfSPZ Vaccine), chemo-attenuated PfSPZ (PfSPZ-CVac) and genetically-attenuated (GA) PfSPZ. All are manufactured by Sanaria Inc. using a nearly identical GMP-compliant process that employs aseptic mosquitoes as bioreactors, purifies the PfSPZ by hand-dissection and filtration, and stabilizes the PfSPZ by cryopreservation in liquid nitrogen vapor phase.
- The prime example of genetic attenuation is PfSPZ-LARC2 Vaccine, a late liver stage arresting, replication competent (LARC) parasite made by deleting two genes (*mei2* and *linup*) required for transformation to asexual blood stages. PfSPZ-LARC2 Vaccine will enter the clinic in 2024.
- Given the 41-86% protection against Pf parasitemia in Malian women of child-bearing potential (WOCBP) provided by a four-week regimen of PfSPZ Vaccine (see prior presentation) and the vaccine's excellent safety record, Sanaria in partnership with the Laboratory of Malaria Immunology and Vaccinology (LMIV), NIAID, NIH, plans to develop PfSPZ Vaccine for licensure to prevent pregnancy malaria.
- Use case scenarios include primary vaccination of adolescent girls with boosting during pregnancy or primary vaccination during the first trimester of pregnancy (or both strategies in combination).
- The next planned clinical trial of PfSPZ Vaccine is a safety study in pregnant women, starting in the third trimester then moving to the second trimester, supported by the benign results of a reproductive toxicology study in rabbits and a favorable FDA review.
- PfSPZ-LARC2 Vaccine may supplant PfSPZ Vaccine if it meets milestones for equivalent safety and improved efficacy.

4c. Quantifying the impact of malaria in pregnancy on maternal anemia, Sequoia Leuba, Imperial College London

- We estimated overall impact of malaria in pregnancy on maternal anemia
- Hemoglobin declines over pregnancy, is even lower if malaria positive, and the impact of malaria on hemoglobin concentration lessens with gravidity, especially in areas of higher malaria transmission
- Because of pregnancy-specific immunity, the malaria-associated reduction in hemoglobin decreases with each infected pregnancy
- We extrapolated patterns across Africa to estimate that malaria is attributable for an additional 700,000 women with severe anemia (hemoglobin < 7 g/dL) among all gravidities, and over 50% of this burden is among primigravidae.
- We will apply this framework to develop wider metrics including maternal mortality and disability-adjusted life years

4d. Intermittent preventive treatment with dihydroartemisinin-piperaquine for malaria in pregnancy in women living with HIV, Hellen Barsosio, KEMRI

- Adding monthly IPTp with an effective and well-tolerated long-acting antimalarial like dihydroartemisinin-piperaquine (DP) to the standard of care with daily unsupervised cotrimoxazole (CTX) in areas of high antifolate resistance has the potential to improve malaria chemoprevention substantially in pregnant women-living-with-HIV on dolutegravir-based cARTs and should be considered for policy.

4e. PBPK modelling to support the clinical development of antimalarials in pregnant women, N. Abba Geiser

- Significant gaps remain to serve the needs of women of reproductive age in malaria-endemic countries. MMV's Malaria in Mothers and Babies (MiMBa) initiative aims at addressing these gaps.
- Pharmacokinetics can be affected by pregnancy; it is therefore important to anticipate potential changes in drug blood levels in pregnant women, to potentially adjust the dose and hence reduce the risk of treatment failure as well as safety issues.
- Physiologically based pharmacokinetic (PBPK) modelling can predict the drug blood levels in pregnant women and help addressing the need for dose adjustment. It is part of the MiMBa development strategy and will support the optimisation of the trial design in pregnancy, the evaluation of the need for lactation studies, and the generation of data to adequately inform on the use of antimalarials in pregnant and lactating women.
- The ultimate goal is to accelerate and optimise the available treatments for pregnant and lactating women and to inform policy and decision-making.

Unfortunately there was no time remaining for discussion. Please reach out to individual presenters directly with any questions.

## Day 2:



Nnenna Ogbulafor, Country Advisory Board Member

### **Country Advisory Board**

#### 1a. Report out: Malaria in Pregnancy Country Advisory Board, Nnenna Ogbulafor, NMEP Nigeria

- The Country Advisory Board (CAB) is an initiative of MiP WG; established in 2021
- Overall aim is to improve outcomes in MiP and enhance partnership and collaboration among member countries
- Pioneer countries on the board includes: Nigeria, Ghana, Sierra Leone, Uganda, Burkina Faso and Burundi
- A total of 21 African countries are involved in the country network
- Each of the six countries on the CAB have established their regional networks and hold meetings as required
- Topical meeting discussions for the country networks hinge on spectra of MiP issues

**ACTION: MOH representatives to let Kristen or co-Chairs know if they are interested in joining the country**

### **MiP Call to Action**

#### 2a. Speed Up IPTp Scale Up campaign update, Abena Poku-Awuku, MMV

- In 2022, the MiP working group initiated the Speed Up Scale Up IPTp campaign to increase access to IPTp for pregnant women in Africa.
- Over 1000 people signed a letter under the umbrella of the campaign calling on decision makers to provide all eligible pregnant women with the malaria preventive treatment they need.
- A book with the signatures was handed over to the African Leaders Malaria Alliance at a media briefing and malaria awards' ceremony at the 2023 African Union Summit.
- As part of the Organization of African First Ladies in Development's meeting at the United Nations General Assembly in September 2023, we are organizing a hand-over event and will be inviting four African First Ladies (East, West, Central and Southern) to champion the campaign in their region.
- We are also planning a pilot campaign in Kenya to increase the uptake of preventive malaria treatments by pregnant women and girls in the country.

### **Using data for MiP programming decisions**

#### 3a. SME & MiP, Molly Robertson, The Global Fund

- Subnational tailoring and stratification of intervention response is become more and more important as resources are limited
- The connections between SME WG and MiP WG can potentially assist in determining how measurements in MiP can help us determine burden stratification as well as the concepts of stratification of intervention quality measures can assist quality improvement targeting.

- Determining specific areas of overlap is important so that we can align on key aspects in our workplan and support each other.

Discussion:

- What are the matchbox indicators? See matchbox tool here: [https://endmalaria.org/sites/default/files/Malaria%20Matchbox%20Tool\\_en\\_web.pdf](https://endmalaria.org/sites/default/files/Malaria%20Matchbox%20Tool_en_web.pdf)
  - Matchbox survey was used by countries and funded by Global Fund looking at behaviors with some aspects of risk groups – trying to look at underserved groups. It would be good to take a look at that and think about what it means for behaviors around ANC visits, treatment uptake behaviors and also what it will do for us in understanding at risk groups.
    - Gender should be added as it is not specifically there and it would be useful to bring that lens into it so countries look at it in a more integrated way. Gender has been a top down discussion and should be more grassroots.

3b. Using data for MiP programming decisions: WHO ANC SMART Guideline to advance guideline implementation and data use, Maria Barreix, WHO

- Smart Guidelines are a new approach to using clinical, public health, and data recommendations in the digital age. At their heart, Smart Guidelines are a comprehensive set of reusable digital health components (e.g., standards, code library access, algorithms, technical and operational specifications) that transform the guideline adaptation and implementation process to preserve fidelity and accelerate uptake.
- Each “Layer” of the SMART guideline approach offers customizable components that can be integrated into country health systems, supporting better care and analytics (establishing standardize data elements, and improving individual level data to be aggregated for national and global indicators)
- When applied in the context of country health systems, the components within each layer can contribute to improved data quality, the overall systems and ultimately, health services.

Discussion:

- Q: We recommend a 13 week contact – is that included?
  - This is included in the policy brief you will find that WHO lets countries define how they will do the 9<sup>th</sup> contact (community based, etc.), so WHO uses officially the 8-contact model.
- Q: Where is the recommendation for the 3 doses?
  - There is a provision for including 3 doses. The guideline that breaks down what services should be provided at what point includes a table with the 8 contacts and the first one listed is at 13 weeks with the possibility of 6 doses.
- Q: Are we closer to defining what a contact is?
  - The 8-contact model is focused on quality improvement and building a relationship between a provider and the pregnant woman, ex: Group ANC. This is still a bit nebulus in terms of measuring, but WHO is trying to develop quality indicators.
- Q: Data kits seem focused on health facility delivery of IPTp. Are you considering having community level IPTp integrated into the data kits?
  - They are not currently developing any digital tools for the community, but the digital adaptation kit can be customized to include community level data. It is not explicitly for community level data, but we need to include all data to look at the fuller picture.
- Q: Where can these recommendations be found?

- <https://www.who.int/publications/i/item/9789241549912>
- Q: The adaptation tool – is it for the country guidelines or the global WHO guidelines?
  - The original document is generic and matches the WHO guidelines, but WHO is doing implementation research to inform adapting it. The digital adaptation toolkit is meant to be adapted to country levels to be useful for their data collection – either through a digital tool or through a registry. There will also be kits on other health areas (HIV, TB, etc.)
- Q: In a 10 minute ANC consultation, is it feasible for the health provider to use the tool and have time for the consultation?
  - We are not trying to increase a double burden on data collection and are looking at how to tailor the tool to provide better health services and to also provide better data usage through dashboards to track women over time since all of her information is in one place and therefore provide overall better quality services.

### 3c. Utility of ANC Attendees as a Sentinel Surveillance Population in Geita, Tanzania & Rarieda, Kenya, Anna Munsey, CDC

- Routinely-collected ANC test positivity rates were compared to household cross-sectional surveys among children under 5 (Geita) and the continuous malaria indicator survey (cMIS) in all ages (Rarieda)
  - In Geita, trends in test positivity among ANC attendees were predictive of trends in test positivity among children when assessed at the council level. In this area, lack of data on ANC attendees' locations of residence obscured associations at the health facility catchment level.
  - In Rarieda, the utility of ANC surveillance was strengthened by collecting ANC attendees' location of residence, resulting in better predictive value of ANC data at the health facility catchment level compared to data from Geita. Trends in ANC test positivity in Rarieda demonstrated the impact of two net distribution campaigns.
- In Geita, we also investigated the utility of questionnaire data collected from ANC attendees to track uptake of interventions. Results highlighted a gap in ITN ownership and use among women in their first pregnancies. However, differential rates of care-seeking, malaria testing, and malaria treatment reported by ANC attendees compared to women surveyed in households raise concern for social desirability bias disproportionately affecting their responses.

### Discussion:

- Q: What MiP services were looked at during the ANC surveillance - Do you ask questions about IPTp at ANC?
  - This is done at the first ANC visit only so many won't have received their first dose of SP yet and most of this was done while people were waiting for their visit.
- Q: Why is this important to MiP?
  - This comes back to strengthening ANC overall and getting interventions added to ANC to allow for additional resources to be devoted to ANC.
- Q: Are you planning on doing this in different transmission settings to see the correspondence in lower transmission settings?
- Q: There is data from DRC presented by Patrick Walker – what is needed for ANC test positivity rate to make it into the surveillance in a more streamlined way so that we don't need to keep proving the same thing over and over again?

- CDC is not making policy decisions – they are in the process of analysing a multi-country study that will provide specific data across transmission settings to inform WHO policy.

### 3d. Using ANC-based malaria screening to reconstruct transmission and burden trends within the community, Joseph Hicks, Imperial College London

- Routine national-level malaria surveillance at first antenatal clinic as conducted in Tanzania allow us to track prevalence trends at a finer spatial and temporal resolution well beyond what has been previously available.
- Mechanistic models can be used to reconstruct transmission and burden trends relevant to both pregnant women and the community.
- This framework can infer seasonality with demonstrated reliability in the Sahel and provides confidence to extrapolate trends where seasonality is less predictable.
- Applying these trends to alternative policy scenarios gives vital information for sub-national decision making --- what interventions should be applied, when and where?

#### General Discussion:

- Is it practical, thinking of health workers who are already overburdened, to be collecting this data vs. the added value of this?
  - 98% of pregnant women getting tested - helps to see trends in areas where malaria is very low
  - Tanzania NMCP used this as one of the data sets when they did stratification
  - Were able to treat a lot of women who were asymptomatic who would have contra-indication with IPTp
- What is the potential for this to be turned into policy/WHO guidelines?
  - Any policy decision would be based on the potential value for the pregnant women of this screening that those who have parasites will get treated.
    - You are providing pregnant women with information about their health and they can get treated
    - Then there is informed care aspect: making an informed decision about the steps you take if you have malaria parasitemia
    - Estimates are provided to WHO every year and these provide a good indication of what's going on, but it would be so much better if we know from the pregnant women themselves about what they are experiencing to be able to make these estimates
    - There is a lot of potential to contribute to the modelling for some of the main impact indicators for pregnant women included in the WHO World Malaria Report (ex: number of malaria cases averted)
  - Feasibility will also need to be considered.
    - Intermittent screening and treatment – there are reasons why this is not being done widely (screening instead of IPTp is proven to be inferior to IPTp)
  - What is needed is data on if determining initial parasitemia at ANC1 plus IPTp is more beneficial than what we are doing now
    - This would be a very large, expensive study to follow women through the full pregnancy
    - We know there are clear benefits to people knowing their status – at what point would there be enough data to move this forward?

- It might not be doable everywhere. Need to know this is implementable.
    - Data use is very practical – if there is a way forward in a more fluid way to make this available to countries, is that also a way forward from the WHO side?
      - WHO GMP and MCH teams need to collaborate.
      - Can use the data to inform where to implement IPTp/C-IPTp at sub national and national levels.
  - From an ANC systems perspective there are questions about how do we get it to all pregnant women.
    - In terms of strengthening the system and improving that care, then maybe we will get more women coming in to ANC and have more women know their status on health issues beyond malaria
  - What is the use of this data? How do we make this clear to those who are collecting the data so that the users/collectors see a value in what they are collecting?
    - It influences what they do. We need to change the narrative so that people understand how it will contribute to improved service quality.
- Why are we not collecting data on bednet usage? Should we be thinking that young, adolescent women have access to nets?
  - CDC is looking at similar trends for bednet usage and hopefully will have more information on this
- How do we create a system where women are empowered and not seen as passive participants – how do we give them some agency in our approach of collecting data?
  - When we are considering women who will be the most disadvantaged, a mobile phone survey will be a biased group. Ownership of cell phones by women is very variable.
  - The ANC platform gives you an unbiased survey of all women attending ANC – we know that in many communities, within a specific community, it is close to 95 – 98%
  - There is work going on self monitoring for blood pressure, self urine testing. Most data is coming from high-income countries and it's a new field, but it is one of the things that in terms of overall ANC care WHO is looking at
  - Community based monitoring might be a way to include these particulars in this discussion
- Other questions/considerations:
  - IPTp3 indicator: What are we doing about the denominator for these calculations? ANC attendance as denominator has issues.
  - Why is reproductive health not discussing IPTp? This should not just be a malaria discussion around this indicator because it's about pregnant women getting the proper care.
  - We have an MiP M&E Brief that was developed in 2019, but it has not moved forward because there are still questions about the denominator that need to be resolved before we can move this forward.

**Engaging innovatively private sector opportunities to increase access to MiP commodities – examples of digital health initiatives**

4a. Increasing Malaria in Pregnancy Services in Kenya through Private Sector Engagement, Edna Anab and Samuel Nderi, Kasha

Kasha is a last mile distribution platform for access to health.

Kasha High Level Overview:

- Kasha provides pharmaceutical, household goods and consumer health products discretely to low-income consumers in Africa, direct-to-consumer as well through pharmacies, retailers, facilities and into communities.
- Kasha provides a broad integrated basket of products that supports health across life stages, from newborn child health, maternal health, family planning, sexual & reproductive health, non-communicable diseases (e.g. hypertension & diabetes), as well as HIV/AIDS prevention & treatment, among others.

#### Summary of the Partnership:

- Kasha is a digital retail and last mile distribution platform delivering health and household goods to consumers, resellers, pharmacies, hospitals and clinics.
- Kasha has delivered 35 million products across Rwanda and Kenya. Kasha also works with enterprises serving as a distribution and healthTech services channel.
- Kasha recently partnered with Medicines for Malaria Ventures (MMV), to increase malaria in pregnancy services in Kenya through private sector engagement.
- Our partnership was carried out in two sub counties in Kisumu with high cases of malaria and teenage pregnancies with limited access to health facilities and also the entire Kenya through online health promotion activities.

#### Achievements

- Offline Campaign: trained 20 agents and distributed MOH-approved IEC materials
- Online Campaign: reached +2M
- Pop-up clinic: 5 medical camps and 2 malaria dialogue days. Reached +1000 people and 109 pregnant women
- Trained 34 Pharmacists
- Other trainings: Kasha health team and Customer care team
- Part of MOH Malaria National Technical Working Groups (social behaviour change, malaria case management and malaria in pregnancy)
- Part of the MOH National World Malaria day technical steering committee

#### Scale up plan

- Replicate MIP activities in other Counties in Kenya with high incidence of malaria (lakebase and coastal region)
- Enlarge the scope to focus on other malaria interventions to support end malaria vision in Kenya

#### Discussion:

- Q: Can you provide more clarity on the role of the community agent?
  - Agents are trained to act as health promoters and to support the carryout last mile delivery of a product. They maintain confidentiality by not knowing what the product is that they are delivering.
- Q: How does the interaction happen between the client and the agent?
  - They come from the same communities and the agent explains the products they are able to provide to address product access issues
  - Clients can order through multiple channels including a call center to maintain confidentiality
  - The agent then receives a pre-wrapped parcel which they deliver to the client
- The malaria in pregnancy component was recently added
- What is the business model for KASHA?
  - Buy and sell range of products and agents make a commission so adding the MIP product to the basket expands access and this will contribute to sustainability
    - The agents are part of the KASHA network and are embedded in the platform.

- **ACTION: Please share any additional questions with Maud**

#### 4b. Maisha Meds: Digital Infrastructure for malaria care in the private sector, Victoria Goodfellow, Maisha Meds

- Patients pay for the care they can afford rather than need, and therefore often forego testing or buy partial / substandard treatment
- A significant amount of global health funder spending is focused on manufacturer subsidies or commodity purchases, but often this does not fully benefit the patient
- Subsidies delivered directly to patients have been proven to lead to behaviour change - in malaria, an RCT with UC Berkeley showed this approach leads to over 300% increase in testing and gains in appropriate care (reduction in malaria negative patients buying ACTs)
- Maisha Meds tech has been built to support direct incentives to providers and patients - and each month around 15,000 patients access subsidised care through our network of facilities
- We have funding from BMGF and USAID to reach 950,000 malaria patients in the next 36 months across Kenya, Nigeria and Uganda
- Benefits include - increased revenue and access to higher quality products for pharmacies; discounted access to quality care for patients; and ability to target funding plus visibility at the last mile for funders
- Our data offering includes visibility on commodity dispensing trends, pricing, and margins at a granular level across our network
- Current use cases under consideration are interventions supporting multi-firstline therapy and interventions for non-malarial fevers; we could investigate supporting additional interventions around malaria in pregnancy if there is clinical benefit and funder interest

#### Discussion:

- Q: Is there anything that MAISHA Meds can do to support increased usage of pre-qualified SP?
  - Incentive piece was initially critical part, but the supply chain management piece is extremely important. If funding is in place they could incentivize pharmacists to stock and then distribute those products.
- Q: Do we think SP is being used for IPTp or treatment?
  - Assumption is it's for IPTp, but they can't tell. Unless we have a program that incentivizes pharmacists to collect that data on pregnant women we are not going to know for sure.
- Q: Can groups who identify pregnant women not yet attending ANC link them to the facility be incentivized?
  - There is some experience in this: MAISHA Meds during COVID looked at uptake of COVID vaccines using referral codes and incentives for CHWs to get people to come for vaccinations in the public sector. So this can also be looked at.
- Q: Are you also looking at presence of counterfeit drugs?
  - They are tracking the brand/manufacturer that moves through the network. They are not doing any checks. They find there is more often substandard medicines than counterfeit.
- Q: What are the needs to implement at country level? If a country is looking more closely at the private sector, what are the steps needed to advise countries to go through?
  - **ACTION: Please have a conversation with Victoria to map this. MAISHA Meds is interested in new countries beyond Kenya, Tanzania and Nigeria**
- Q: When patients buy medicine over the counter – is there any way of including the compliance with these regarding packaging? Is there any patient guidance provided with the drugs?

- We encourage pharmacists to provide the right packaging and have people take photos to ensure they are getting the right course
- Do trainings with pharmacists around quality and wider education around strong, good case management

#### 5a. Antenatal Care within Primary Health Care, Ashley Malpass, USAID/PMI

- Antenatal care (ANC) is necessary for ensuring pregnant people's highest possible level of health and well-being, but these services are often not included in discussions on primary health care (PHC) and universal health coverage (UHC)
- Although ANC1 attendance is high, ANC4+ and 8+ attendance are well below targets
- There are many barriers to ANC attendance, but one of the under-addressed barriers is the lack of availability of ANC services at all health facilities at least 5 days a week, limiting where and when women can receive services
- Participants can advocate for expanded ANC availability as part of in-country discussions on PHC and UHC

#### Discussion:

- Q: How can we sensitize communities, government, facilities that ANC is available?
  - There are two sides: lack of availability or limited availability which we can work on through policy advocacy for every facility to provide ANC five days a week
    - Ex: Have a schedule of the ANC services posted at the facility
- Lack of awareness around ANC: Health care providers and CHWs to help share the knowledge of the importance of ANC – but also to know when those services are available.
- In Uganda the focus is more on the quality of ANC. For example, a woman with three previous caesarean scars ends up in labor instead of being prepared for another caesarean section. This should be caught during ANC. We need to make sure women are able to access the prescribed WHO ANC package.

#### 5b. Multisectoral Mass Action Against Malaria (MAAM) for a Malaria Free Pregnancy, Peter Mbabazi,

- Development
  - Malaria is a cause and result of poverty, women economic empowerment reduces malaria(MFPED, Parliament, President)
- Occupational
  - Women outdoor activities from 5am to mid-night, consideration of household dynamics,(Men, Local Govt)
- Behavioral
  - Appropriate risk communication and continuous sensitization to improve mosquito net use among pregnant women(ABCDE)
  - “Am I Malaria Free today?”, Use of gate keepers for reaching PW (HH Head, Schools, VHT, Peer women, HW, leaders)
- Nutritional
  - Anaemia, Iron, Vit. B12 ,Folate, deficiencies, to be home based supplies of Milk, Egg,Veg(Pumpkin leaves), within compound /reach for every PW(VHTs, Leaders)
- Health care Access
  - 24 /7 access of health services within reach by PW(MOH, Local Govt, Private sector)
  - Essential Medicare supplies, Prompt Medicine, HRH, (MOH, Local Govt, Private sector)

- Early antenatal care attendance and health seeking (Dx and TX within 24 hrs of fever) MOH, Local Govt, Private sector)
- Data
  - Data could be captured automatically as part of routine ANC service delivery and interconnected with the national HIM systems, which would allow for real-time support of communities, facilities and health workers providing these services(DHIS, HMIS)
- Vector control
  - Improving LLIN, IRS, Larviciding coverage, breeding sites reduction (MOH, Local Govt, Private sector)
- Housing
  - Home improvement reduces malaria in Pregnancy(Housing, Local Govt, Mayors & Town clerks)

Visit MSWG page <https://endmalaria.org/our-work-working-groups/multi-sectoral-action>

#### 5c. SBC for Early ANC Initiation, Angela Acosta, JHU CCP

- SBC encompasses any set of interventions designed to increase the adoption of healthy behaviors and influence the social norms that underpin those behaviors.
- Malaria Behavior Survey data show that factors associated with early ANC initiation vary significantly by and within countries emphasizing the importance of tailoring SBC interventions to the context.
- By knowing these associations, we can craft a diverse set of communication and non-communication interventions tailored to these factors.
- Communication interventions should seek to boost complete and accurate knowledge, self-efficacy, positive attitudes toward IPTp, and partner communication.
- Non-communication interventions can include collaborating with service delivery partners to automate pregnancy screening and referrals and to make ANC services more accessible to communities.

#### Discussion:

- Q: Can you explain how advocacy and SBC differ and how we should consider both?
  - The main difference is that advocacy is mainly intended to gather political will and gain financial commitments whereas SBC is geared towards changing behaviors.
  - It is a continuum – for policy makers there also needs to be behavioral change to get to the change in political will
- Q: Are other countries adopting pre-conception care?
  - Kenya has this in their guidelines adopted from guidance by WHO.
  - It is important to have cross-sectional areas to discuss what strategies are being used to get women of reproductive age to seek care.
- Q: Nigeria is doing a study to see if G-ANC can get women into ANC earlier. The MBS used 4 months as early ANC, but in Nigeria we use 13 weeks. Why is the MBS using 4 months?
  - It is the way the questions are listed in DHS and MIS so MBS used the standard of 4 months. It gives some indication of early ANC, but it's not clear how women interpret this question.
- Having children as advocates within families is a good strategy.
- Preventing the infection from happening before they get to ANC cannot be overlooked for its importance. Can you use this data to look at why bednet usage is not higher? Could this be included in the pre-conception package?

- We need to talk more about access issues and how to sustain continuous universal access, including those in pre-conception period since they are the least prioritized.
- Breakthrough Action captures data on net use as part of the MBS.
- Behavioral economics have helped change provider behaviors of health care providers for adherence to malaria testing guidelines. Could this also be used to sway pregnant women to attend ANC early?
  - There is a process for looking at how behavioral economics can be applied to different behaviors in different settings so it could be possible.

## **Action Planning**

### **Commitments:**

#### **Ministries of Health:**

##### ***Group 1: Francophone/Lusophone countries***

- Restitution of the results of the work of the last RBM MiP meeting.
- Establishment of a technical working group on the prevention of malaria in pregnancy and include all stakeholders (reproductive health program, mental health...).
- Advocacy for the recruitment of additional CHWs to cover the entire country.
- Advocacy for free ANC.
- Implement new WHO recommendations for the treatment of malaria in pregnancy.
- Advocacy for funding for the broadcasting of spots and micro-programmes in local languages on the importance of ANC in the first trimester of pregnancy.

##### ***Group 2: Anglophone countries***

#### Resource mobilisation for commodities:

- Establish funding gaps for all Malaria commodities especially SP.
- Advocate to government to release funds for SP .
- Ensure that SP and other malaria commodities are in the essential medicines list.
- Coordinate forecasting, quantification and procurement of SP.
- Sustained advocacy to government /WHO for prequalification of local service providers.

#### Stakeholder coordination:

- Mapping of inter& intra ministerial stakeholders.
- Regular coordination meetings with stakeholders.

#### Improving quality of care:

- Operationalisation of MNCH quality of care teams.
- Implement, follow-up and documentation of actions from quality improvement teams including concerns from client exit interviews.
- Monitor the implementation of quality improvement approaches.

#### Policy adaptation/adoption:

- Development of country specific guidelines based on local context.
- Ensure development and implementations of annual operational work plans.

#### Reinforcement of ethical code of conduct:

- Sensitise or train Health workers on the provision of respective care.
- Strengthen staff performance appraisals.
- Evidence based reward mechanisms.

### **Implementers:**

- Disseminate existing SBC CHW toolkit/IM MiP toolkit for integration into ANC promotion & MiP interventions
- Support country-level technical working groups

- Establish standards/measures of quality of care/supportive supervision
- Leverage existing projects/resources to support rollout of new policies
- Build capacity of NMCPs in gender
- Integrate MiP into adolescent health initiatives

**Researchers:**

- Review data from MBS
  - Qualitative surveys to better understand the reasons women do not come, and what would enable them to come
- Community engagement dialogues to identify solutions
- MMV commits to identify new drugs which are safe in 1st trimester
- Research into how to best communicate to pregnant women (qualitative studies on gender)
- Implementation research to identify ways to improve access to care
- Formative research around what is needed to encourage adolescents to attend
  - Would they prefer adolescent specific care vs mixed groups with older women?
- With WG, consider how to design implementation research

**Donors:**

- Continue to support the RBM MIP WG secretariat
- Support (as much as feasible with country support) participation of MOH attendees to the annual meeting (both NMCP and MHP)
- Coordinate amongst donors (Global Fund, PMI) and MOH to ensure SP commodity needs for IPTp are met