PATH Malaria in Pregnancy Project

Improving Uptake of Interventions Kick-Off Workshop

January 18–19, 2013
Arusha, Tanzania
Background

Each year approximately 50 million women living in malaria-endemic countries become pregnant and are at risk of getting malaria. In these countries, malaria in pregnancy (MIP) is one of the leading causes of maternal and neonatal mortality and morbidity. Prevention of malaria in pregnancy, with either insecticide-treated nets (ITNs) or intermittent preventive treatment during pregnancy (IPTp), reduces neonatal mortality and low birth weight.

In June 2012, the Maternal Health Task Force (MHTF), in collaboration with the Bill & Melinda Gates Foundation (BMGF), the Liverpool School of Tropical Medicine (LSTM), the London School of Hygiene and Tropical Medicine (LSHTM), and PATH, convened a technical meeting in Istanbul, “Malaria in Pregnancy: A Solvable Problem—Bringing the Maternal Health and Malaria Communities Together.” The meeting identified a number of challenges and opportunities at the global and country level to improve MIP outcomes. In October 2012, building on the Istanbul meeting, the Gates Foundation awarded PATH and the World Health Organization (WHO) a one-year “Prevention of Malaria in Pregnancy” grant to reduce adverse outcomes due to malaria in pregnancy by increasing IPTp and ITN uptake in selected countries in East Africa (Kenya, Tanzania, and Uganda).

In addition to providing support to key in-country partners, PATH will work closely with the Roll Back Malaria (RBM) Malaria in Pregnancy Working Group (MIP WG), through a sub-grant, to promote guideline harmonization and global advocacy, and to work to introduce the new MIP guidance in other high-burden countries. Three project objectives will contribute to this goal:

1. Standardize global and country guidelines, including MIP and focused antenatal care (FANC).
2. Improve the quality of FANC to increase uptake of IPTp and ITNs in up to three countries.
3. Increase prioritization of and funding for MIP activities at a country level.

The project design will serve as a model for scaling activities to other areas and will form a solid basis for further funding proposals to major donors.

Kick-Off Workshop

The project team contacted maternal health and malaria leaders in Kenya, Tanzania, Uganda, and Zambia to identify delegates to attend the Global Maternal Health Conference 2013 (GMHC2013) in Tanzania in January 2013. A two-day kick-off/planning meeting was organized following the GMHC2013 conference. The gathering included representatives from the Bill & Melinda Gates Foundation, WHO, United States Agency for International Development (USAID), PATH, the Maternal and Child Health Integrated Program (MCHIP), MHTF, academia, and country delegations from Kenya, Tanzania, Uganda, and Zambia (see list of participants in Annex 1).

3 http://maternalhealthtaskforce.org/conference/conference-website
1. The very diverse background of the participants ensured not only expertise in malaria and maternal/child health, but also very rich discussions and mutual learning.

Meeting objectives were to:

- Reach consensus on best practices, based on the lessons learned and best practices from the four countries.
- Identify entry points and mechanisms to strengthen collaboration between malaria and maternal, newborn, child and reproductive health (MNCRH) experts in Kenya, Tanzania, and Uganda.
- Identify areas where the quality of FANC can be improved to increase uptake of IPTp and ITN in Kenya, Tanzania, and Uganda.

During the meeting the new WHO IPTp and FANC guidelines, the role of anemia and its relation to malaria as well as maternal and newborn mortality and morbidity, best practices to uptake of MIP interventions as well as country experiences, and lessons learned and challenges (key issues) were presented and discussed. Country delegates identified areas where the quality of FANC can be improved in order to increase IPTp and ITN uptake and developed draft country action plans for adaptation and adoption of the new WHO guidelines (see workshop agenda in Annex 2).

**Day One – Morning**

During the welcoming words and an introduction session by Mariam Claeson (BMGF) and Catharine Taylor (PATH), participants learned how this meeting was built on the momentum generated by the June 2012 Istanbul MIP Workshop and the Arusha GMHC2013 conference, which had three panel presentations/discussions devoted to MIP.

Pam Putney (PATH) asked participants to introduce themselves and voice their expectations of the workshop. Participants were excited to see malaria and maternal/reproductive health experts gather together to collaborate, share, and learn from each other. They wanted to better understand how to support each other from the global to the country level. They looked forward to collaborating at the national and sub-national levels and coming up with concrete steps to take to improve the demand for and the quality of FANC which better integrates MIP preventive and curative services. They hoped that the meeting would inspire country-level leaders to continue the work and provide leadership on how to tweak and modify global ideas to country-level realities.

Michel Pacqué (PATH) gave a short overview of PATH’s Improving Uptake of MIP Interventions project, funded by the Gates Foundation.

Dr. Triphonie Nkurunziza of WHO gave an overview of FANC Guidelines and Best Practices, *Why a New Approach and New ANC Training Material in the African Region* (see Annex 3). Her presentation highlighted the fact that while the vast majority of women attend antenatal care (ANC) at least once and about 50% go for ANC four times or more, only 10% receive IPTp.\(^4\) WHO is in the process of developing new guidelines to improve the quality of FANC.

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\(^4\) Countdown to 2015 Decade Report (2000-2010)
The presentation generated many questions and discussion points. Participants noted that the current WHO and country guidelines need to be updated, but the process is a time-consuming and resource-intensive exercise. Many were concerned that the FANC guidelines, which prescribe the weeks when women should come for ANC, may be in contradiction to the MI recommendations that a woman should receive IPTp every four weeks, and that once the new guidelines are out, national programs will have to translate them into national policies and training and education materials.

The discussion around the new FANC guidelines was followed by Erin Ferenchick’s presentation, of the new WHO guidelines for sulfadoxine-pyrimethamine doses during pregnancy (IPTp-SP) and RBM update (see Annex 4). The presentation built on the observation that efforts to scale up IPTp-SP in a number of countries in Africa have slowed down.

Participants shared their questions for clarifications around the guidelines and suggested that statements such as “early in the second trimester,” which replace “after quickening,” be clarified with “after 12 weeks.” Some wanted clarity on where such a visit falls in the new FANC guidelines. If the new target is a minimum of three SP doses, then indicators measuring IPTp 3 (and IPTp 4?) should become the standard rather than IPTp 2.

It became clear that WHO should provide not only a high-level (simple) brief on the guidelines, but also clarify the new language, include solid background information/justification, and provide guidance for implementation. As malaria programs succeed in reducing transmission and improving MIP outcomes, WHO will need to issue (program) guidelines and recommendations for low-transmission areas.

A discussion around folic acid (FA)—“Folic acid at a daily dose equal or above 5 mg should not be given together with SP as this counteracts its efficacy as an antimalarial”—led to a suggestion that the new guidelines may necessitate some modification, suggesting that SP can be given with 0.4 mg of FA (which is the standard dose of FA in the iron/FA combination pills).

The role of folic acid and iron was further discussed after Rae Galloway’s presentation, MIP: part of an integrated package to improve health and nutrition (see Annex 5). Rae reminded us that anemia may be the only clinical sign of malaria and that the management and prevention of anemia/nutrition is thus an integral part of a rational, integrated approach to MIP.

While it was clear that 0.4 mg FA and 60 mg iron would take care of the problem of giving SP with 5 mg folic acid, there was concern that 60 mg iron would not be enough for anemic women. Anemic women should indeed be getting extra iron/FA (but even double the preventive amount would be safer with SP), and they should periodically be re-evaluated (hemoglobin [Hb] testing). More importantly, all women should be screened for anemia. Anemic women need to be treated, but preventive doses are necessary for ALL women, not just anemic ones. Many programs, however, have chronic stockouts of drugs and supplies. The additional cost of supplementation is another challenge for mothers who may have to pay out of pocket and weak health systems unable to provide the supplement free of charge. It was pointed out that good ANC requires strengthening labs at facilities and at point of contact since it is not about only anemia (Hb) testing, but also rapid diagnostic tests (RDTs) for conditions such as malaria, syphilis, proteinuria, and HIV.
Another discussion was around when best to initiate nutrition interventions—with adolescent girls or at the beginning of pregnancy, food fortification, and school health programs.

The discussion on how to improve ANC continued with Koki Agarwal’s presentation, Best Practices and Entry Points to Uptake of IPTp (see Annex 6). Countries were challenged to provide examples of how they strengthened their MIP programs through integration and collaboration. Some have an MIP technical group, where members from the malaria control program regularly meet their reproductive health program colleagues, e.g., to discuss commodities security. Participants mentioned it was important to have a clear delineation of roles and responsibilities so it is clear who makes policies and who does implementation, and how.

Several examples were provided on how to strengthen the supply chain/decrease stockouts and reduce inappropriate use of SP as a substitute for artemisinin-combination therapies (ACTs): dissemination of guidelines for malaria treatment emphasizing that SP is for IPTp of pregnant women only, and teams at implementation level (district and region) during supervision redistributing commodities from one facility to another to address stockouts.

Directly observed treatment (DOTS) can be a problem if safe drinking water is not readily available. Some facilities gave mothers cups for drinking water and some are giving women bananas to enable them to swallow the pills where water is unavailable.

Some programs/projects have used an SMS (short message service) platform in which women can get messages specially targeted to their stage of pregnancy. Another example was the use of SMS to improve stock management of ACTs.

Community health workers (CHWs) can play a role in improving ANC, e.g., by demand creation, but can also help in improving aspects of quality through dialogue with their communities. Communities can develop their own solutions and are able to discuss and take ideas back to the facilities for feedback. Community distribution of IPTp can be successful, but there was concern that if not carefully implemented, community distribution of IPTp-SP may reduce ANC attendance. There is, however, a growing body of evidence around the use of mothers’ groups in ANC and their positive effect on behavior change. In general community distribution encounters first resistance from the Ministry of Health until pilot programs can demonstrate how to improve uptake.

It was stressed that there is a great need to improve quality of ANC as this will automatically raise demand. Currently women seek ANC but are often disappointed when the facilities “do not provide much.”

Day One – Afternoon

During the afternoon the representatives from Zambia, Kenya, Uganda, and Tanzania gave presentations on the situation with malaria in their countries, progress made in their MIP programs, lessons learned, and challenges they face.
Zambia

Zambia was the first country to present. Overall Zambia has far outperformed its neighbors in improving MIP outcomes (see Annex 7).

Highlights from the presentation and the discussion following the presentation include the following:

Guidelines are disseminated from the central level to the provincial level, province by province. The provincial medical officer and his team invite folks for a workshop to go through the entire document with them and then ask them to disseminate the key information to the lower level. Provincial ANC mentorship teams have been a quick and low-cost method for rolling out guidelines, as well as improving quality of focused ANC and MIP services. These teams usually have a midwife or two and use national guidelines and training manuals. They reach out to the facility level for one or two days and train the frontline workers.

Safe Motherhood Action Groups (SMAGs) are made up of volunteer community members (men and women), preferably of reproductive age, who have a child or two as well as good interpersonal skills. They mobilize for better maternal health, and at basic health posts they may be the ones to provide basic care. Champions from the community are invited to workshops.

Kenya

Kenya’s current national malaria strategy covers the years 2009–2017. Highlights of the presentation (see Annex 8) and discussion include the following:

The capacity for diagnosis and treatment is not high, but the country has recently introduced RDT kits to increase coverage. The capacity for microscopy is limited, even in district hospitals. Health workers have updated guidelines, but they tend to “take them home to read,” which means the guidelines often are not returned to the clinic for use there. Now guidelines are distributed in the form of a “desk calendar.” Kenya has an extensive network of community volunteers, but has some legal hurdles in employing them officially since there are regulations in place around minimum salaries.

Uganda

From Uganda the participants learned that there is some concern about the lack of a reliable health management information system (HMIS) and the country depends heavily on Demographic and Health Surveys (DHS) and Malaria Indicators Surveys (MIS) for its coverage data (see Annex 9). The last MIS data is from 2009, with another survey due to take place this year. Most of the funding for malaria control is from partners. Uganda has MIP champions, one of whom is the First Lady.

There is some misuse of bed nets (e.g., for weddings, fishing, covering cows to protect them from being bitten by flies, keeping them in their suitcases for the hospital). The supply chain management is weak: at central stores they have the supplies, but at the district level there are often stockouts. There is a lack of integration/coordination, with “MCP and RH doing their own thing.” Recently, the programs started having integration meetings. To date there have been
two meetings, and a malaria in pregnancy working group has been started, which will feed into child health and national disease control.

Another important achievement includes the “Saving Mothers Giving Lives” program. The program has introduced vouchers for pregnant women, which has increased the uptake of maternal health services, resulting in a reduction in maternal mortality.

To improve the logistics system, Uganda is piloting “the last mile delivery” system, in which small motorcycles are used and funded by the regional medical stores to deliver drugs to health centers.

**DAY TWO**

**Tanzania**

Day 2 started with the Tanzania country presentation (see Annex 10). The presentation was rich in community-based (survey) data. Services are free of cost for children under five years of age and for pregnant women. This reduces barriers for mothers, but may serve as a disincentive for program managers to dip into their accounts to cover MIP commodities. This has been mitigated somewhat by labeling SP a program commodity, and thus “paid for” by partners. However, SP is still used for malaria treatment when ACT stockouts occur.

There is strong political will and support for malaria control in Tanzania, with the previous president telling his story through mass media and the current president making a TV pitch for putting nets up every night. From the discussions the participants also learned that Tanzania has a “net culture.” A net is often the first item individuals get when starting out “on their own.” The country is 75% lowlands (with rivers and swamps). In the highlands mosquitoes, and therefore malaria, are less of a threat.

A list of some common challenges mentioned during the presentations and discussions is shown in the box below, as well as a description of best practices, successes, and lessons learned.
Common Challenges

Commodities:
- Stockouts of SP (e.g., due to weak logistics/distribution system, funding mechanism, or misuse)
- Unavailability of ITNs during ANC (e.g., due to policy such as mass distribution)

Quality of care:
- Lack of guidelines, job aids, and IEC materials at district levels
- Confusion about guidelines (e.g., about schedule/safety for IPTp late in pregnancy)
- Weak supervision systems
- Weak motivation or poor attitude of providers
- Challenges in ensuring continuous education or training when new policies/guidelines are introduced. High staff turnover.
- No water for DOTS

Community awareness:
- Women come “late” for first visit
- Women don’t come for “all 4” visits

Management:
- Weak routine reporting systems and data management
- Poor quality of data
- ANC registers don’t allow for all IPT recordings

Financing:
- ANC in general and MIP underfunded

Coordination:
- Need for better communication between Malaria and Maternal/Reproductive Health units in MOH
- Weak involvement of private sector
Best Practices, Successes, and Lessons Learned

Commodities:
- ITN distribution during ANC and community-based mass distribution
- Use of vouchers for ITNs
- Last mile delivery model to improve availability of SP and reduce stockouts

Quality of care:
- Clear guidance to providers on when pregnant women should receive IPTp-SP
- MIP guidelines are included in FANC and CHW curriculum
- Supervision checklists developed with supportive supervision from district health management team (DHMT)
- Quality-of-care monitoring tools
- Facility-based coaching
- Pre-service training

Community awareness:
- IEC material for community health workers
- Community advocacy and dialogue activities
- Community action groups

Management:
- Community-based surveys (DHS, MIS)
- Involvement of DHMT in planning and implementation
- Integration results in more efficient use of resources
- Use of operational research to solve challenges (e.g., increase quality)
- New technologies such as SMS for monitoring stocks and as reminders to mothers

Coordination:
- Strong collaboration and strong leadership of malaria program on development and implementation of policies and guidelines

Champions and financing:
- Multiple in-country champions and collaboration between donors, research institutions, civil society, NGOs, and MOH improves accessibility to funds.

Group Work

After the Tanzania presentation, the participants split up, by country, into four small groups. Facilitators circulated between the groups while the country teams worked to develop draft plans for improving MIP activities, concentrating on the uptake of IPTp and ITNs. The groups received general guidelines (see Annex 11).

Each group worked for several hours on their plans before reporting out to their colleagues. Uganda was the first to present. Draft work plans for each country are provided below.
## Uganda Draft Workplan

<table>
<thead>
<tr>
<th>Key challenges</th>
<th>Objective</th>
<th>Strategy</th>
<th>Activities</th>
<th>Indicators</th>
<th>Responsible person</th>
<th>Resources</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Weak collaboration between NMCP and RHMCH at all levels; National, Zonal, District, Health-Sub district, HC III, HC II</td>
<td>Strengthening collaboration at all levels</td>
<td>Identify champions/Key stakeholders</td>
<td>Develop action plan and budget to strengthen uptake of IPTp and ITNs</td>
<td>Action plan and budget developed</td>
<td>RH&amp;NMCP MIP focal persons</td>
<td>Funds, refreshments, hall hire, coordination</td>
<td>March</td>
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<tr>
<td>2 Harmonization of guidelines, job aids, protocols, IEC materials etc.</td>
<td>Harmonization of guidelines, job aids, protocols, IEC materials etc.</td>
<td>Pool resources</td>
<td>Hold review meetings</td>
<td>Number of meetings held</td>
<td>RH&amp;NMCP MIP focal persons</td>
<td>Funds</td>
<td>June</td>
</tr>
<tr>
<td>3 Community involvement</td>
<td>Increase community involvement</td>
<td>Work with VHTs</td>
<td>Capacity building</td>
<td>Number of VHTs trained</td>
<td>RH &amp;NMCP MIP focal persons and HPE unit</td>
<td>Funds</td>
<td>November</td>
</tr>
<tr>
<td>4 Data quality</td>
<td>Improve accuracy, consistence and analysis</td>
<td>Review of current MIP indicators</td>
<td>Update data collection tools to include all MIP indicators</td>
<td>Data collection tools updated</td>
<td>RH&amp;NMCP MIP focal persons and Resource center</td>
<td>Stationery</td>
<td>March</td>
</tr>
</tbody>
</table>
Rae Galloway made the suggestion that in their next draft, they include a revision of the supplementation guidelines around folic acid and iron during pregnancy. She suggested that iron/FA guidelines be changed to incorporate the new SP dosing and the concomitant recommendations around withholding it during IPTp administration.

**Kenya Draft Workplan**

**OBJECTIVE 1:** To increase uptake of IPTp2 by pregnant women in Kenya

<table>
<thead>
<tr>
<th>Strategy</th>
<th>1. Demand creation at:</th>
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<tr>
<td></td>
<td>• Community level through the CHW</td>
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<td>• Facility level through the health workers</td>
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<td>• Mass media</td>
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<td>2. Build the capacity of HWs to improve quality of care of FANC</td>
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<td></td>
<td>3. Improve documentation</td>
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</table>

| Activities | • Orient the CHWs on FANC/MIP messages |
|            | • Orient the HWs on FANC/MIP |
|            | • Print more client brochures on MIP and also posters |
|            | • Use the FM radio channels to air FANC/MIP messages |
|            | • Integrated support supervision |
|            | • Use of champions, high level and the community level |
|            | • Task sharing with the CHWs to give SP as DOTs and record |

| Indicators | Proportions of women receiving IPTp2 |
|           | The number of CHWs trained of MIP |
|           | The number of HW trained in FANC/MIP |

**OBJECTIVE 2:** To increase the correct use of long-lasting insecticide-treated nets (LLINs)

| Strategy | • To use CHWs to educate on the importance of net use |
|          | • To use school children as change agents |
|          | • To collaborate with the fishery department to educate and enforce proper use of LLINs |

| Activities | • CHWs to educate and demonstrate the correct use of the LLINs in the community dialogue days |
|            | • Identify actual LLIN use by talking to the community |
|            | • Carry out school health education |
|            | • To educate the beach management units on the proper use of the LLINs |

| Indicators | • Proportion of pregnant women sleeping under LLINs |
|           | • LLIN coverage - HMIS |

**OBJECTIVE 3:** To improve adherence to malaria case management as per guidelines by the service providers

| Strategy | • Using mentorship |
|          | • Training of the HW |

| Activities | • To train more HWs on the use of RDTs |
|            | • Improve reporting (SMS system) |
|            | • Collaborate and have the RDTs in the facilities |
|            | • Mentorship on case management |
|            | • Support supervision |

| Indicators | • Number of HWs trained in RTDs |
|           | • Reports availed on RTDs and treatment of MIP |

When asked why they kept IPT2 as an indicator, Elizabeth Washika informed us that it is a beginning aspiration and Jenny Hill pointed out that the language still says “minimum of two.” There is thus a need for policy dialogue to keep the indicator at 2 or change to 3.
### Zambia MIP Work Plan

<table>
<thead>
<tr>
<th>Activity</th>
<th>Indicator</th>
<th>Funding</th>
<th>Timeline</th>
<th>Responsible Person or Organization</th>
<th>Strategy</th>
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<tbody>
<tr>
<td><strong>1. Objective 1: Address changes in WHO guidelines/update country guidelines</strong></td>
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<tr>
<td>• Circulate the changed WHO guidelines and brief senior management</td>
<td>Review meetings held</td>
<td>Funding for the review of policy documents</td>
<td>6 months</td>
<td>NMCC/MCDMCH</td>
<td>Stakeholder engagement</td>
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<tr>
<td>• Review guidelines/policy in FANC/Safe Motherhood and NMCC TWGs</td>
<td>Updated guidelines developed</td>
<td>ZISSP</td>
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<td>Collaboration between NMCC &amp; MCH to end up with a harmonized set of policy guidelines</td>
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<td>• Submit to the policy and planning units in the 2 ministries for approval and endorsement</td>
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<td>MACEPA</td>
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<td></td>
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<td>GRZ</td>
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<td><strong>Dissemination Plan</strong></td>
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<tr>
<td>• Identify roles and responsibilities for guideline dissemination, jointly done with NMCC and RCH</td>
<td>IEC materials and job aids developed</td>
<td>MACEPA</td>
<td>3 months</td>
<td>MCDMCH/NMCC</td>
<td>Identify funding sources for consultant and designer</td>
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<tr>
<td>• Consultant to clean up the documents</td>
<td></td>
<td>ZISSP</td>
<td></td>
<td></td>
<td><strong>Work in collaboration with the Health Promotion Unit</strong></td>
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<tr>
<td>• Development of IEC materials and job aids, posters, brochures, etc., and translation into the local languages</td>
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<td>GRZ</td>
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<tr>
<td>• Engage a graphic designer to shape up the documents</td>
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<td>CSH</td>
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<td>• Official launch</td>
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<td>• Provincial orientations – cascade orientations up to the Health Facility level</td>
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<td>Activity</td>
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<tr>
<td><strong>Objective 2. Improve IPT &amp; ITN Supplies. This will apply to 2014 as 2013 is already in the pipeline.</strong></td>
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<tr>
<td>• Review the quantification process of IPT and ITN through the TWGs to see where we stand and the bottlenecks that hinder progress</td>
<td>??? Change ITN indicator – 1. ITN at 1(^{st}) visit before 20 weeks, 2. ITN at 1(^{st}) visit at 20 wks or later</td>
<td>funding sources GRZ</td>
<td>6 months</td>
<td>NMCC/ MCDMCH</td>
<td>Identify other funding sources, Work with RHCS Coordinator.</td>
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<tr>
<td>• Identify organizations that are procuring nets</td>
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<tr>
<td>• Quantification, calculation of the ITNs and IPTp based on expected pregnancy rates per district. ITN TWG has net distribution guidelines and will come up with the best net distribution strategy.</td>
<td>ITPp indicator to include 3+ dose to cover for 4(^{th}) and 5(^{th}) dose.</td>
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<td>• Monitor utilization levels of IPTp and ITNs</td>
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<tr>
<td><strong>Objective 3. Improve quality of FANC</strong></td>
<td>Indicator – 1(^{st}) IPT before 20 weeks.</td>
<td>Identify source of funds CSH/GRZ</td>
<td>9 months</td>
<td>MCDMCH</td>
<td>Work with HP unit</td>
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<tr>
<td>• Review IEC materials, job aids, posters, etc., identify if there is need for modification</td>
<td>Indicator: Number of Health Workers oriented to FANC</td>
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<td>• Package of job aids is needed</td>
<td>Indicator: % of GRZ funding that is allocated to Maternal Health</td>
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<td>• Advocate for increased FANC supplies to ensure quality FANC</td>
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<td>• Lobbying for increased funding to MCDMCH from MOFNP and parliamentarians</td>
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<tr>
<td>• Lobby with ministries for increased funding to the MCH dept.</td>
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<tr>
<td>• Governmental and NGOs to help with quantification and procurement and distribution of FANC supplies</td>
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<td>Activity</td>
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<td>Objective 4: Community Engagement</td>
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<tr>
<td>• Revive the White Ribbon Alliance</td>
<td>Sensitization done</td>
<td>GRZ/CSH/MACEPA</td>
<td>9 months – 1 year</td>
<td>NMCC/ MCDMCH</td>
<td>Identify funding sources</td>
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<td>• Advocacy meetings with community leaders –</td>
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<td>parliamentarians, councilors, traditional</td>
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<td>leaders, church leaders</td>
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<td>• Orientation of SMAGs – Cascade orientations</td>
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<td>• Community sensitization</td>
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<td>• Radio spots – through community radio</td>
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<td>stations</td>
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<td>• Community drama</td>
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<td>• IEC materials including birth plans</td>
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<td>• Income-generating activities</td>
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## Tanzania Workplan

**Goal/priority: Increasing IPTp Coverage:**

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<th>Activities</th>
<th>Indicators</th>
<th>Resources</th>
<th>Time frame</th>
<th>Responsible</th>
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<tbody>
<tr>
<td><strong>Objective 1: To adopt policy update and align Malaria and FANC guidelines</strong></td>
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<td>Present WHO recommendations to senior management at the ministry</td>
<td>Document presented to Sr. mgt and approved</td>
<td>None</td>
<td>April</td>
<td>MoHSW (RCH &amp;NMCP)</td>
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<tr>
<td>Include MIP updates in FANC and Case Management guidelines (Meetings)</td>
<td>Guidelines incorporated into FANC and CM</td>
<td>Funds for meetings</td>
<td>April</td>
<td>MoHSW (RCH &amp;NMCP) partners</td>
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<tr>
<td>Disseminate new guidelines to regions and districts</td>
<td>All regional and district oriented on new guidelines</td>
<td>Funds (for FANC)</td>
<td>July</td>
<td>MoHSW (RCH &amp;NMCP)</td>
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<td><strong>Objective 2: To improve commodity security</strong></td>
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<td>Assess obstacles to supply chain for SP at national, zonal and facility levels including: Accountability, communication, ordering and distribution system and monitoring stock outs</td>
<td>Assessment report</td>
<td>Funds</td>
<td>March</td>
<td>MoHSW (RCH &amp;NMCP) Partners</td>
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<td>Sharing findings of assessments with stakeholders, e.g., RMO and DMO meetings, SMTWG, development partners.</td>
<td>Meetings conducted</td>
<td>Funds (facilitators)</td>
<td>April-June</td>
<td>MoHSW (RCH &amp;NMCP) Partners</td>
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<tr>
<td>Developing the action plan with some of these stakeholders to address bottlenecks in improving the commodity security at various levels</td>
<td>Action plan developed</td>
<td>None</td>
<td>April</td>
<td>MIP task force</td>
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<tr>
<td>Reinforcing SP to be the program commodity, with MSD officials (through other meeting opportunities)</td>
<td>Practice in SP ordering is changed with MSD</td>
<td>None</td>
<td>February</td>
<td>MIP Task force MSD</td>
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<tr>
<td>Improve tracking of SP through system</td>
<td>System in place to track SP stockouts</td>
<td>None</td>
<td>May</td>
<td>MIP task force JSI</td>
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<tr>
<td>Activities</td>
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| **Objective 3: To improve service provision based on new guidelines**                                                                                                                                                                                                                                                                                                                                                                                                     | Roll out of new MIP guidelines to RCH providers (as part of FANC trainings, other related trainings?)  
  - Conducting TOTs for cascade trainings to RCH clinic in-charges  
  - Job aids for HWs at facilities  
  - Conduct supportive supervision with a checklist reinforcing the new guidelines                                                                                             | Number of TOTs and service providers trained on new guidelines  
  Job aids developed, disseminated and in use  
  Number of national/regional/district supervision visits conducted using the revised RCH checklist                                                                                       | Funds      | August-October 2013 | MoHSW (RCH &NMCP)  
  MIP task force  
  Partners |
| Improve monitoring of SP-IPTp recording within HMIS  
  - Reinforce record keeping using HMIS  
  - Explore ways to capture data for IPTp3 (if this gets approved by the ministry)                                                                                                                                                                                                                                                                  | Quality recording and reporting on IPTp in place                                                                                                               | No separate funding | October 2013 | MoHSW (RCH &NMCP)  
  Partners  
  MIP task force |
| **Objective 4: Creating demand in community**                                                                                                                                                                                                                                                                                                                                                                                                                     | Produce and disseminate IEC materials with updated information based on revised guidelines                                                                                                                             | IEC materials produced, distributed and in use                                                                                                          | Funds for national coordination | October 2013 | MoHSW (RCH &NMCP)  
  Partners  
  MIP task force |
| Incorporate new guidelines in future (subsequent) demand creation activities including training of CHWs, communication campaigns, etc.                                                                                                                                                                                                                                                                     | Demand creation activities incorporating new MIP guideline                                                                                                       | No separate funding | Ongoing            | MoHSW (RCH &NMCP)  
  Partners  
  MIP task force |
Workshop Wrap Up

Everyone agreed that, given the short amount of time the teams had, they all came up with a solid first draft of an action plan to improve MIP outcomes in their countries. The country teams will take their plans and present and discuss them with colleagues, after which they will refine and expand their plans for submission by February 14, 2013 for further comments and input.

Catharine Taylor and Kate Teela provided inspiring closing remarks.
Annex 1: Participants

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<td>Winani</td>
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<td>Lois</td>
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<td>Dr. Chibesa</td>
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<td>Rob</td>
<td>Ainsle</td>
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<td>Johns Hopkins Bloomberg School of Public Health</td>
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<td>Mariam</td>
<td>Claeson</td>
<td>Deputy Director for Maternal, Neonatal and Child Health</td>
<td>Bill &amp; Melinda Gates Foundation</td>
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<td>Erin</td>
<td>Ferenchick</td>
<td>Malaria in Pregnancy Consultant</td>
<td>WHO</td>
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<td>Jenny</td>
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<td>Edna</td>
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<td>Taylor, Global Program Leader, Maternal and Child Health and Nutrition</td>
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<td>29</td>
<td>Kate</td>
<td>Teela, Associate Program Officer, Family Health</td>
<td>Bill &amp; Melinda Gates Foundation</td>
<td><a href="mailto:Kate.Teela@gatesfoundation.org">Kate.Teela@gatesfoundation.org</a></td>
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### Annex 2: Agenda
Friday, January 18, 2013

<table>
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<tr>
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| 9:00 a.m. – 9:30 a.m | Welcome and Introductions  
Catharine Taylor, PATH & Mariam Claeson Bill & Melinda Gates Foundation |
| 9:30 a.m. – 9:45 a.m | Meeting Objectives, Agenda & Guidelines  
Pam Putney PATH |
| 9:45 a.m. – 10:00 a.m | Overview of PATH MIP Project  
Michel Pacqué PATH |
| 10:00 a.m. – 10:30 a.m | Overview FANC Guidelines & Best Practices  
Dr. Triphonie Nkurunziza WHO AFRO |
| 10:30 a.m. – 10:45 a.m | MIP: Part of the Integrated Package to Improve Health & Nutrition Outcomes  
Rae Galloway PATH |
| 10:45 a.m. – 11:00 a.m | Coffee Break |
| 11:00 a.m. – 11:45 a.m | Best Practices & Entry Points to Uptake of IPTp & ITNs Discussion  
Koki Agarwal Jhpiego RBM & Erin Ferenchick WHO |
| 11:45 a.m. – 1:00 p.m  | New WHO Guidelines for SP Doses During Pregnancy & RBM Update  
Erin Ferenchick WHO |
| 1:00 p.m. – 2:00 p.m  | Lunch |
| 2:00 p.m. – 2:45 p.m  | Improving the Uptake of IPTp/ITNs  
Lessons Learned & Best Practices from Zambia & Discussion  
Zambia Country Team |
| 2:45 p.m. – 3:30 p.m  | Improving the Uptake of IPTp/ITNs  
Lessons Learned & Best Practices from Kenya and Discussion  
Kenya Country Team |
| 3:30 p.m. – 4:15 p.m  | Improving the Uptake of IPTp/ITNs  
Lessons Learned and Best Practices from Uganda and Discussion  
Uganda Country Team |
| 4:15 p.m. – 4:30 p.m  | Coffee Break |
| 4:30 p.m. – 5:15 p.m  | Improving the Uptake of IPTp/ITNs  
Lessons learned and Best Practices from Tanzania and Discussion  
Tanzania Country Team |
| 5:15 p.m. – 5:30 p.m  | Review Agenda for Day 2  
Pam Putney PATH |
<table>
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| 9:00 am - 9:15 am | Brief Summary of Day 1 and Overview of Day 2  
|               | Pam Putney PATH                                                      |
| 9:15 am - 10:30 am | Country Working Groups to Draft Plans for improving uptake of IPTp and ITNs |
| 10:30 am - 10:45 am | Coffee Break                                                          |
| 10:45 am - 12:00 pm | Country Working Groups Continued                                       |
| 12:00 pm - 12:30 pm | Presentation of Draft Zambia Plan & Discussion  
|               | Zambia Participants                                                   |
| 12:30 pm - 1:00 pm | Presentation of Draft Kenya Plan & Discussion  
|               | Kenya Participants                                                    |
| 1:00 pm - 2:00 pm | Lunch                                                                |
| 2:00 pm - 2:30 pm | Presentation of Draft Tanzania Plan & Discussion  
|               | Tanzania Participants                                                |
| 2:30 pm - 3:00 pm | Presentation of Draft Uganda Plan & Discussion  
|               | Uganda Participants                                                   |
| 3:00 pm - 3:45 pm | Country Working Groups Finalize Draft Plan                           |
| 3:45 pm - 4:00 pm | Coffee Break                                                          |
| 4:00 pm - 4:45 pm | Next Steps Discussion  
|               | Catharine Taylor & Michel Pacqué PATH & Erin Ferenchick WHO          |
| 4:45 pm - 5:00 pm | Closing Remarks  
|               | Catharine Taylor PATH                                                |
Annex 3: Why a New Approach and New ANC Training Material in the African Region

Why a New Approach and new ANC training material in the African Region

Dr Triphonie Nkurunziza
Family Heath & reproductive programme area coordinator
WHO AFRO

Current State of Malaria in the World

• 247 million cases yearly
  – (86% in Africa)
• 881,000 deaths yearly
  – (91% in Africa)

Pregnant women are the main adult risk group for malaria

Facts About Malaria and Pregnancy

• 50 million pregnant African women in endemic areas yearly
• Malaria is more frequent and complicated during pregnancy
• In malaria-endemic areas, malaria during pregnancy accounts for:
  – Up to 15% of maternal anaemia
  – 8-14% of low birth weight
  – 30% of “preventable” low birth weight
  – 3-8% of infant death

Antenatal care coverage, (% of women reporting 4+ visits), 2000 – 2010

The limitations and challenges of “Traditional” ANC

• ANC interventions did not seem to be addressing the major causes of maternal mortality that result from complications of labour and childbirth.
• Evidence was gathered on which components of ANC were critical for optimal maternal and newborn outcomes.
• Quality of care provided appeared poor in many developing countries.

Coverage of interventions along the continuum of care
### Reasons for Poor Quality ANC in AFRICA!

- **Clinical care is poor**
  - We gather information but do not use it to manage patient, e.g. haemoglobin levels
  - Inadequate management of problems, e.g. malaria, pre-eclampsia, bleeding
  - Failure to record relevant information

- **Services are not client-friendly**
  - Factory assembly-line ANC system
  - Not client-specific
  - Congestion and lengthy waiting times

- **Poor communication**
  - Poor counselling skills
  - Information and education is not relevant to the woman

### Why a New Approach to ANC?

- Most established ANC programs were established along lines of developed countries with little local modifications.

- Increased ANC coverage did not result in reduced MMR’s in most developing countries, raising questions about quality of care.

- Accumulating evidence from DHS surveys showed that ANC did not meet recommended standards in many countries.

### What is Focused ANC?

It emphasizes these principles:

1. **Quality of care rather than quantity of visits**
   - (Four comprehensive visits for women with normal pregnancy)

2. **Individualised care**

3. **Disease detection and not risk categorisation**
   - (All pregnant women are at risk)

4. **Evidence-based practices included in antenatal care**

5. **Birth preparedness and complication readiness**

### Quality of Care not Quantity of Visits

**Recommended schedule** of antenatal visits

- **For a normal healthy pregnancy**

  - **BOOKING** During first trimester and preferably before 14 weeks

  - **1st visit** End of fourth month (Preferably at 14-20 weeks)

  - **2nd visit** Around sixth month (At about 24 weeks)

  - **3rd visit** In eighth month (At 28-32 weeks)

  - **4th visit** In ninth month (At about 36 weeks)

  - More frequent visits or different schedules are based on the woman’s individual needs

### Who are Intended Participants in this Training?

- 5 days course

- Primarily for in-service training of antenatal care providers (midwives, nurses and doctors).

- Can also be used in basic and post-basic midwifery and medical programmes.

### Sessions in the FANC Module

1. Understanding Focused Antenatal Care
2. Organizing Antenatal Care
3. Factors Influencing Pregnancy Outcomes
4. Identifying Antenatal Problems
5. Managing Antenatal Problems
6. Providing Preventive Care Measures
7. Antenatal Counselling
8. Malaria Prevention and Control in Pregnancy
Sessions in the FANC Module....2

9. Anaemia Prevention and Control in Pregnancy
10. Preventing Mother-to-Child Transmission of HIV
11. Ultrasonography in Pregnancy
12. Skills Practice: Selected Clinical Skills
13. Implementing Focused Antenatal Care in Your Facility

Next steps

• Finalization – 2 weeks
• Printing
• Dissemination of the English version in countries-Training of trainers
• Translation into French

Companion Reference for the Course

• The WHO document *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice (PCPNC)*
• PCPNC provides a range of evidence-based norms and standards for the provision of high quality pregnancy, childbirth and postpartum care.

**Updated WHO Policy Recommendation:**

**Interruption Preventive Treatment of Malaria in Pregnancy using Sulfadoxine-Pyrimethamine (IPTp-SP)**

- **Agent:** Sulfadoxine-Pyrimethamine
- **Target:** Pregnant women
- **Program:** Roll Back Malaria

**Rationale for the Needed Change**

During the last few years, WHO has observed a slowing of efforts to scale up intermittent preventive treatment of pregnant women (IPTp) for malaria with Sulfadoxine-Pyrimethamine (SP) in a number of countries in Africa.

While there are several reasons for this, confusion among health workers about SP administration for IPTp may also be playing a role.

For this reason, WHO is clarifying its recommendations, and urging national health authorities to disseminate these recommendations widely and ensure their correct application.

**Process for Developing Updated Policy**

- **Evidence review group**
  - Tasked to re-evaluate the current WHO recommendations on IPTp-SP and make recommendations on any changes that are needed related to:
    - The number of treatments with SP that should be given
    - The effectiveness of IPTp at preventing high parasite densities
    - The level of prevention achieved using SP
    - The safety of the combination of SP and pyrimethamine
  - To identify the critical gaps in knowledge and a priority needs agenda for clinical and public health interventions

- **Consultation meetings**
  - Convened to obtain input from technical experts and stakeholders
  - To address gaps in the evidence base and consider the implications of new clinical data

- **Consultation meeting on the scope and content of the meeting**
  - To identify areas for clarification and modification of the existing guidelines

**Evidence-Based Support for Updated Policy**

- Results of an unpublished meta-analysis that compared 3 or more doses of IPTp-SP (median of 4 doses) with the standard 2 dose regimen in 7 randomized trials of 9,499 pregnancies demonstrated the benefit of more doses:
  - Higher mean birth weight (MDR, OR = 1.18; 95% CI 1.11-1.26), corresponding to a relative risk reduction of 1.6% (95% CI 0.3-2.9)
  - Evaluations have also observed a risk of adverse outcomes in maternal anemia (MDR, OR = 1.87; 95% CI 1.10-3.17), maternal mortality (OR = 1.98; 95% CI 1.11-3.54), maternal sequelae (OR = 1.65; 95% CI 1.01-2.71)
  - Prevention of low birth weight in infants born to S and pregnant women (MDR, OR = 1.78; 95% CI 1.24-2.57)
  - Prevention of maternal anemia (MDR, OR = 1.87; 95% CI 1.10-3.17)

- There is currently no consistent evidence of harm associated with administration of IPTp-SP in areas with high resistance to SP. There is good evidence supporting the benefits of IPTp-SP even in areas with high prevalence of quinoline resistance.

**Evidence of the Efficacy of SP in Areas with SP Resistance**

- Results from a retrospective study in an area of Tanzania with a high level of SP resistance (including a 35% prevalence of SP-resistant Plasmodium falciparum) showed a reduction in the prevalence of transmission that was associated with a decrease in IPTp-S.

- Observational studies in Kenya, Tanzania, and Malawi, where there is significant SP resistance, have shown an increase in birth weight and a reduction in maternal anemia with increasing doses of SP. However, these studies are limited in their ability to control for potential confounders.

**Updated WHO Policy Recommendation (October 2012)**

**Intermittent Preventive Treatment of Malaria in Pregnancy using Sulfadoxine-Pyrimethamine (IPTp-SP)**

In areas of moderate-to-high malaria transmission, IPTp with SP is recommended for all pregnant women at each scheduled antenatal care visit. WHO recommends a schedule of four antenatal care visits.

- **First IPTp-SP dose** should be administered as early as possible during the 2nd trimester of gestation.
- **Second IPTp-SP dose** should be given at least 1 month apart.
- **Third IPTp-SP dose** may be administered up to the time of delivery, without safety concerns.
- **IPTp-SP** should not be administered to women receiving co-trimoxazole prophylaxis.
Updated WHO Policy Recommendation (October 2012)

Intermittent Preventive Treatment of malaria in pregnancy using Sulfadoxine-Pyrimethamine (IPTp-SP)

In some countries where IPTp with SP is currently being implemented, transmission of malaria has been reduced substantially. In the absence of information on the level of malaria transmission below which IPTp-SP is no longer cost-effective, such countries should not stop IPTp.

There is currently insufficient evidence to support a general recommendation for the use of IPTp-SP outside Africa.

Monitoring of IPTp-SP effectiveness and safety of multiple doses is essential and should continue. Research is ongoing to define the best methodology for such monitoring: this will be shared when available.

Strategy for Dissemination of Updated Policy

- WHO/MDA Policy Brief is currently being developed to support updated policy recommendations
- Current policy at high level documents supporting evidence, expected benefits, and ongoing research
- Consideration of amplification and guidance on implementation of policy
- Focus on 12 priority countries
  - Brazil, Colombia, Mexico, Egypt, Eritrea, Kenya, Tanzania, Madagascar, Côte d’Ivoire, Senegal, and Uganda
- Utilize the resources, network, and expertise of WHO AFRO Office
- Two regional workshops in 2013 to review current national Malaria control policies and assist countries in updating Malaria guidelines to reflect updated WHO policy
- Utilize networks within MalariaWG and WRIT to disseminate updated policy to key partners organizations at country level
- Develop advocacy strategy and WHO messages which include key aspects of updated policy
- Stakeholders mapping to leverage civil society and ensure community involvement in dissemination of updated policy from national to sub-national level

Translating Policy into Practice:

- Not only is IPTp-SP lifesaving and straightforward to implement, it is also highly cost-effective for both prevention of maternal malaria and reduction of neonatal mortality.
  - Prioritizing IPTp-SP as a key intervention for pregnant women (combined with ITN use) and effective care management should remain a priority across stable malaria transmission countries.
- Ministries of Health should deliver full coverage and use of these life-saving interventions.
  - Efforts should be made to provide ITNs to women as early in pregnancy as possible and to provide IPTp at every ANC visit, beginning in the 2nd trimester. Three or more doses of IPTp-SP are more effective than two.
- Strengthening comprehensive ANC services including access to and demand for these services is critical to improve SP outcomes.
  - Although the majority of pregnant women attend ANC at least once during pregnancy, and often twice, IPTp-SP uptake as well as ITN coverage among pregnant women is alarmingly low across most countries. This is a major missed opportunity at present.

Evidence of Efficacy of More Frequent Doses of SP IPTp in Reducing Low Birth Weight

EVIDENCE OF EFFICACY OF MORE FREQUENT DOSES OF SP IPTp ON BIRTHWEIGHT

- 3 doses better
- 2 doses better

Back-Up Slides: Graphs

Evidence of Efficacy of More Frequent Doses of SP IPTp on Birth Weight

- 3 doses better
- 2 doses better
MiP: part of an integrated package to improve health & nutrition

Presentation at the MiP Meeting

By Rae Galloway

January 18-19, 2013

Arusha, Tanzania

MiP

- IPTp
- ITNs
- Effective case management

MiP—Benefits for the Mother

Increases Hb & Reduces Anemia
 Increases Oxygen Transport to Tissues
 Increases energy generation in the body
 Decreases fatigue and risk of dying

Malaria & Anemia

- Anemia (clinical test or pallor) may be the only sign that a woman has malaria
- Women with anemia should be tested for malaria
- Women with anemia should be treated and receive an integrated package of interventions to address all its causes

MiP—Benefits for the Mother (con’t)

Prevents & clears malaria parasites in blood vessels & decreases risk of malaria parasites blocking flow of blood to the tissues
 Decreases risk of illness/morbidity and reduced productivity
 Decreases risk of dying

MIP—Benefits for the Fetus & Newborn

Prevents & clears malaria parasites from the placenta, increasing flow of nutrients to the fetus
 Decreases risk of stillbirth, prematurity, low birth weight, nutrient deficiencies & anemia in the newborn
 Decreases risk of perinatal death
**Needed: an integrated package**

- The impact of MiP is increased when complementary interventions are given to increase intake of essential nutrients
- For example, an integrated package of interventions is needed to address all the causes of anemia

**Complementary interventions to prevent & treat anemia**

- Iron-folic acid supplementation during pregnancy (currently 60 mg of iron/400 mcg of folic acid for 180 days)—additional IFA for anemia
- Deworming during the second trimester and third trimester (where prevalence is high)
- Improving maternal diet to ensure adequate intake of anemia-related micronutrients (e.g., iron, vitamin A)

**Benefits for mothers & newborns from IFA during pregnancy**

- Increases Hb of both mom & newborn
- Decreases prematurity
- Increases birth weight
- Decreases risk of dying in both mom & newborn
- In Indonesia and Nepal, there was a 40% decrease in newborn mortality when their mothers took IFA supplements (Dibley, 2010; Christian, 2009)

**Complementary interventions to increase weight & micronutrient status of the fetus & newborn**

- Improve diet (one additional meal per day and increase diversity) during pregnancy
- Decrease work load
- Delayed cord clamping to increase iron stores in the newborn

**Caveats for IPTp & IFA supplementation**

- In countries with a combined IFA pill (60 mg of iron & 400 mcg of folic acid), no problem
- In countries that routinely give ≥5 mg of folic acid, women should not take this dose with SP treatment
- Transition from the 5 mg dose to the combined IFA
- Treatment of anemia in pregnancy should include testing of & treatment for malaria & extra iron without FA

**The road to effective programs**

- Effective policies to support programs
- A functional supply chain
- Creating demand at the community level
  --community knowledge to support optimal behaviors
  --counseling to assist mothers in complying with regimens
  --BCC support materials, tools, etc.
The road to effective programs

- Monitoring the process to understand effective program implementation
- Readjusting the program as needed
- Intra and inter-sectoral coordination, bringing together relevant health themes (reproductive & maternal health, malaria, nutrition) and beyond health (environment, water & sanitation, local government and others)
Annex 6: Best Practices and Entry Points to Uptake of IPTp – Koki Agarwal

Best Practices & Entry Points to Uptake of IPTp

Koki Agarwal, MCHIP/Jhpiego, Director

MIP Implementation Components and Stages of Implementation

- Program Components
  1. Integration
  2. Policy
  3. Commodities
  4. Quality Assurance
  5. Capacity Building
  6. Community awareness & involvement
  7. Monitoring and Evaluation
  8. Financing

Stages of Implementation
- Country has achieved MIP readiness
- Country is approaching MIP readiness
- Country is developing and testing MIP systems
- Policy in MIP testing activity is already formulated

Integration
- Countries use focused ANC platform
- Services are integrated at facility levels
- Joint Planning and implementation of MIP programs
- Avoid vertical funding streams

MIP Policy
- Policies to be revised by the NMCP in coordination with RH
- Guidelines and training materials are harmonized
- Dissemination to all providers

Commodities
- Address Stock-outs of SP & ITNs at ANC
- Avoid inappropriate use of SP
- Make ITNs free for pregnant women and available through ANC

Quality Assurance
- Ensure performance standards in place
- Drinking water for DOTS available
- Routine supportive supervision
Capacity Building

- Ensure preservice education includes MIP
- Coordinate inservice training on MIP

Community Involvement, Awareness

- Engage community to raise awareness of importance of MIP
  - Have women understand the dangers
  - Come in early for their first visit
- Explore community based distribution of IPTp

Monitoring and Evaluation

- IPTp uptake to be recorded in registers for HMIS
- Collect other data like % of women with severe anemia
- Collect information on ITN distribution through ANC

Financing

- Most cost-effective intervention
- Advocate for more funding through donors and other mechanisms

Discussion
**Annex 7: Zambia MIP Presentation**

**Preventing and Treating Malaria in Pregnancy Zambia**

PATH Consultative Meeting Arusha, Tanzania January 18–19, 2013

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**Zambia Overview**

- Population: 13 million
  - ~704,511 pregnancies in 2012 at risk for malaria
- TFR: 5.9
- MMR: 591 / 100,000
  - Malaria accounts for 20% of maternal deaths
- IMR: 70 / 1,000
- Life expectancy at birth: 52.6 years
- Adult HIV prevalence: 13.5%
  - Among pregnant women at ANC: 16.4%
- Recent economic growth but with persistently high poverty rates

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**National Health Policy & System**

- **Primary Health Care program**
  - Government provision of a Basic Health Care Package
  - Provided as close to the family as possible at all levels of care including community (CHW)
  - Priorities for the basic package driven by disease burden

- **Strategy** emphasizes health care infrastructure and human resource shortages, multisectoral responses, and increased access to basic environmental health facilities

- HMIS in place for routine data collection

- **Access**:
  - Households within 5 km of a health facility:
    - 99% in urban areas
    - 50% in rural areas

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**Malaria Endemcity**

All people in Zambia are at risk for malaria infection although transmission levels vary across the country

Transmission is year-round with a peak from January to April—during and following the warm wet season

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**Reported Malaria Cases per 10,000 Population 2011**

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**Parasitaemia in Children Under 5**
National Malaria Control

- High level of political commitment to malaria control and integration of activities in non-health sectors
- National Malaria Control Center (NMCC) with linkages to:
  - Provincial health offices
  - District health management teams
  - Community – Neighborhood Health Committees & CHWs
- Early and lasting ties to the Roll Back Malaria (RBM) partnership

Malaria Control Scale-Up for Impact (1)

- Scale-up from 2005 with increasing availability of funding and the first national strategic plan (2006-11)
- "Scale-up for impact" with the aim of achieving high intervention coverage and documenting reduction in malaria burden
- Over 6 million ITNs distributed from 2007 to 2010
- Over 5 million ITNs distributed in 2011
- IRS coverage expanded to 54 districts in 2010

Malaria Control Scale-Up for Impact (2)

- Switch to ACT (artemether-lumefantrine / AL / Coartem®) as the first-line antimalarial treatment in 2002
  - Chloroquine and SP commonly used prior to this change
- Scale-up of free blood testing (RDT or microscopy) from 2008 and free ACT in public facilities and through CHWs
- As of 2011, high availability of blood testing (83%), first-line ACT (92%), and SP (73%) at public health facilities (ACTwatch outlet survey)

Malaria in Pregnancy Coverage 2010

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<th>Lowest wealth</th>
<th>Highest wealth</th>
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<td>Took any IPT</td>
<td>86%</td>
<td>78%</td>
<td>93%</td>
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<tr>
<td>Took 2+ doses of IPT</td>
<td>70%</td>
<td>61%</td>
<td>83%</td>
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<tr>
<td>ITN use – women 15-49</td>
<td>47%</td>
<td>45%</td>
<td>43%</td>
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<tr>
<td>ITN use – pregnant women</td>
<td>46%</td>
<td>51%</td>
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MIP Program Components

- All MIP services are provided by the government as part of the Basic Health Package at no or low cost as part of ANC
  - 94% of pregnant women attend ANC at least once
  - 92% attend at least twice
  - 60% attend 4+ times
  - Only 19% attend during 1st trimester
- ITN provided during first visit
- Counseling, iron, and folic acid provided at all visits
- IPT - directly observed therapy at ANC
  - 3 doses of SP during 2nd & 3rd trimester
    - 3 doses are given as recommended by WHO MIP guidelines
    - Beginning at 16 weeks and repeated with 1 month between treatments
Evolution of MIP Policy & Services (1)

- Prior to 2002, pregnant women were to use chloroquine as prophylaxis though the policy was not well implemented
- IPT strategy revised and clear MIP guidelines created and rapidly disseminated by 2003
  - Members of a National Malaria Taskforce orientated personnel at provincial and district levels
  - After orientation, provincial teams were formed to ensure implementation at district level
  - Additional orientations were conducted for training institutions, medical schools, civil society, etc.
- IPT and ITN distribution was expanded from 2005 to cover ANC clinics in all 9 provinces

Evolution of MIP Policy & Services (2)

- Guidelines for case management of malaria during pregnancy revised in 2008
  - First line in 1st trimester is quinine
  - First line in 2nd and 3rd trimester is Artemether/Lumefantrine
  - Quinine is the 2nd line treatment
- ITNs were initially available through ANC at a highly subsidized cost (~$0.80) and later delivered free of charge from 2008

MIP Coordination

- The MOH Reproductive Health Unit is responsible for ANC activities
- MIP guidelines rolled out from 2003 were never approached separate from RH – but rather rolled out under focused ANC
- The Safe Motherhood Unit in liaison with NMCC coordinates training, ITN distribution, and SP procurement is done by MOH
- Focused ANC and MIP guidelines are in the Safe Motherhood Guidelines developed in 2006 as well as the national PMTCT curriculum and the CHW training curriculum

Recent & Current Research

- 2009-2011 SP study
  - In vivo efficacy – few failures observed
  - Birth outcomes (observational study) – 3 doses of SP associated with reduced anemia, reduced low birth weight and preterm deliveries, and improved infant outcomes
  - Molecular markers for resistance are rarely found
- Ongoing RCT focused on IPT drug options given reduced efficacy of SP
  - Cotrimoxazole compared with SP
- Ongoing RCT focused on the safety and efficacy of ACTs for case management of malaria during the 2nd & 3rd trimesters
  - Testing AL, AS-AQ, AS-MQ, DHA-PPQ

Challenges (1)

- ANC attendance is high but delayed, missing opportunity for counseling on ITN use
- Funding gaps for SP and ITNs for ANC
  - The government is contributing to funds for MIP programs but still relies heavily on donor support
- SP stockouts
  - Quantification does not take measure of SP into account
  - Lack of consumption data at district level
  - Supply chain issues

Challenges (2)

- ITN stockouts at health facilities
  - Reportedly due to funding, quantification, procurement and planning issues
- Good relationship between NMCC and RH Unit; however, most stakeholders agree that there is a gap in MIP program coordination with need for better communication, e.g., through a working group or taskforce dedicated to MIP
Successes & Lessons Learned (1)

- MIP guidelines are integrated into guidelines used by appropriate providers at all levels
  - MIP rooted from the beginning in well-established MNCH program within MOH/RTI Unit. As part of focused ANC guidelines, MIP guidelines are natural for providers
  - Integration of focused ANC in PMTCT service curriculum allowed for training additional providers
  - MIP guidelines are included in CHW curriculum.
  - Community involvement through the Neighborhood Health Committees and Safe Motherhood Action Groups raises the profile of MIP.
- Provincial ANC mentorship teams have been a quick and low-cost method for rolling out guidelines as well as improving quality of focused ANC and MIP services

Successes & Lessons Learned (2)

- Uptake of IPT has been facilitated by clear guidelines to healthcare providers as to when pregnant women should receive 3 doses of SP in the context of focused ANC.
  - Guidelines are clear on what should be provided to women who attend first visit before 16 weeks and those who receive all 3 doses before the 4th visit.
- Uptake of ITN use among pregnant women has been facilitated through free ANC distribution as well as mass campaigns
- Strong MOH/NMCC collaboration on development and implementation of policies and guidelines has been essential, and the NMCC is credited for strong leadership
Annex 8: Kenya MIP Presentation

Kenya Country MIP Presentation
Arusha, Tanzania

Elizabeth Washuka - DRH
Julius Kimiti - DOMC
Dr Augustine Ngizulu - RUPIEGO
Dr Onditi Samuel - PATH

Key country statistics
- Total Population - 38 million (2010 pop census) – increased to 39,929,290 in 2012 (DHIS2)
- Women of child bearing age 9.6 million (2010 pop census) - increased to 9,846,363 in 2012 (DHIS2)
- Number of pregnant women annually – 1.5 million (2010 pop census) increased to 1,657,628 in 2012 (DHIS2)
- Maternal mortality ratio – 488/100,000 live births (KDHS 08/09)
- Neonatal mortality rate – 31/1000 live births (KDHS 08/09)
- Anemia rates – 6,000 severe anemia in pregnant women

MIP policy adoption and program implementation history
- 1998 – SP adopted for IPTp to prevent malaria in pregnancy
- 2001 – MIP adopted - a strategy for malaria prevention during pregnancy
- 2004 – ACTs adopted for treatment of uncomplicated malaria
- 2006 – ACTs launched for treatment of uncomplicated malaria
- 2006 – Free distribution of nets adopted to continue every 3 yrs
- 2009 – Artemesate adopted for use as pre-referral treatment in severe malaria
- 2011 – Free distribution of nets to attain Universal Coverage
- 2011 – Low dose folic acid (0.4-0.6mg) dose adopted for use with SP
- 2012 – National launch of RDTs for malaria Case Management

National Malaria Policy & Strategy

Kenya Malaria Endemicity Map

MCH Clinic at a Health Facility in Western Kenya
Key stakeholders, partnerships and MiP “champions”

- NCMR Division
- DPM, DOH, DOH, KEMRI
- Research institutions
- KEMRI/CDC
- Commodity supply organizations
- KEMSA
- Institutions of higher learning
  - Universities, KMTCs
- NGOs
  - Pagnia, PATH, PSI, CHAM, NACHAM, KASAAM
- Donor Agencies
  - WHO, UNICEF, USAID / PML, DFID

Baseline surveys and MiP needs assessments

- Malaria program review report 2009
- WHO assessment report (factors influencing uptake of IPTp) 2009
- Kenya malaria indicator survey - 2007, 2010
- Pre-mass net distribution micro-planning (needs assessment) in all targeted districts - 2011
- Post mass net distribution survey - 2012

Key issues/challenges that affect implementation of IPTp and ITN uptake

- Key issues:
  - IPTp2 uptake still low – 25% (KMRS - 2010)
  - ITN use among pregnant women low - 41% (KMRS 2010)
  - Inadequate healthcare workforce in rural health facilities
  - Treatment of malaria without parasitological diagnosis in most health facilities
  - Commodity stockouts
  - Resistance of malaria parasite to SP
  - Provision of poor quality MiP services in many facilities due to staff workload

Challenges

- Many new districts leading to - staff shortages, inadequate commodity supply, inadequate facilities for service provision
- Many competing priorities in Divisions (DRI, DOH, DOH)
- High staff turnover
- Different practices in provision of services by service providers due to inadequate dissemination of policy documents
- Poor data management practices especially at facility level
- Shared distribution of health facilities
- Varying health care seeking behavior in different communities

FANC quality

- ANC 1st visit 92%
- ANC 4th visit 47%
- 6% of ANC facilities screen for anaemia
- 57% screen for urine protein
- 53% screen for urine glucose
- 6% screen for syphilis
- 53% do blood grouping and Rh factor
- IPTp provision by 96% of facilities – KSPA- 2010 (up from 84% in 2004)

FANC quality and statistics
ITN delivery and uptake

ITN delivery:
- Routine net distribution through ANC clinic
  - One net at 1st ANC visit
  - Another net at delivery or 1st CWC visit
- Mass net distribution campaigns
- Retail social marketing
- Commercial sector

Launch of LLINs

A mother receives an LLIN from Minister for Public Health and Sanitation, Hon. Beth Mugo

A mother with LLITNs received during MND

LLINs issued at ANC at a district hospital

Mosquito net coverage

Survey type
Case management of malaria

- Parasitological confirmation is recommended
- Uncomplicated malaria:
  - 1st trimester - oral quinine
  - 2nd and 3rd trimester – 1st line AL, 2nd line DHA-PP
- Severe malaria:
  - Referral – LMQuinine or Artesunate
  - On admission – IV Quinine or Artesunate

Launch of Malaria RDTs

Director of Public Health and Sanitation (Dr Sharif) cuts the ribbon, to officially unveil the RDT kit

Supervision system

- Malaria Supervision Manual developed and disseminated in 2010
- Malaria Supervision Checklist developed and disseminated
- DHMT monthly supportive supervision of quality of service provided by health facilities
- Integrated quarterly supportive supervision to districts by national and provincial level and feedback
Advocacy and communication

- Malaria Communication Strategy (2010 – 2014) produced and disseminated
- Malaria Essential Action Guide developed and disseminated (2012)
- Development, production and dissemination of service provider simplified MIP guidelines:
  - orientation package, job aids, posters, DVD on prevention of malaria in pregnancy
- Development, production, translation and dissemination of community MIP IEC materials:
  - orientation package, job aids, posters, ANC client brochures,

Advocacy and communication cont

- Community dialogue days in Community Units
- Sharing of best practices in different forums – conferences, stakeholder meetings, publications, websites, media campaigns

Monitoring and evaluation

- Development of MIP SBM/R tool for monitoring quality of MIP services provided in facilities
- Integrated M&E of MIP
  - Monitoring data through DHS-2 system
  - Evaluation through analyzed Annual Operational Plans (AOPs)/MIP reports

Lessons learned

- Engagement of DHMTs during planning of implementation of field activities assists in sustainability of the activities

Best practices

- Facility-based orientation of service providers on simplified MIP guidelines using RRI approach disseminated uniform information to a large number of health workers in a short period (Paper on the methodology presented during the FOCO World Congress, Rome, Italy 2012)
- Regular facility based CMEs in Level 4 & 5 in Nyanza and Western supported by APHIAPlus Western Kenya
- Community sensitization, registration, follow up and referral of pregnant women for ANC services by CHWs in 12 malaria endemic districts in Bungoma, Siaya and Homa bay counties
End

Thank you
Annex 9: Uganda MIP Presentation

Outline of the presentation

- Introduction
- Policy and intervention priorities
- Partnerships, stakeholders, and champions
- Progress (achievements, best practices, and lessons learned)
- Key issues and challenges
- Action points and way forward

Key Country Statistics

<table>
<thead>
<tr>
<th>YEAR</th>
<th>2000/01</th>
<th>2005/06</th>
<th>2009/10</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPULATION</td>
<td>22,845,618</td>
<td>27,586,774</td>
<td>31,411,989</td>
<td>33,454,521</td>
</tr>
<tr>
<td>PREGNANT WOMEN</td>
<td>3,142,281</td>
<td>3,379,359</td>
<td>1,570,599</td>
<td>1,672,720</td>
</tr>
<tr>
<td>UNDER 5 YEARS</td>
<td>4,240,283</td>
<td>5,111,140</td>
<td>5,842,680</td>
<td></td>
</tr>
<tr>
<td>MMR</td>
<td>525</td>
<td>435</td>
<td>488</td>
<td></td>
</tr>
</tbody>
</table>

Epidemiological Stratification based on TPR

Malaria morbidity and mortality - HMIS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>2009</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Malaria Cases</td>
<td>12,000,000</td>
<td>12,000,000</td>
</tr>
<tr>
<td>Malaria in Pregnancy cases</td>
<td>216,000</td>
<td>243,000</td>
</tr>
<tr>
<td>Malaria admissions</td>
<td>391,000</td>
<td>476,000</td>
</tr>
<tr>
<td>Malaria in Pregnancy admissions</td>
<td>22,000</td>
<td>41,000</td>
</tr>
<tr>
<td>Malaria deaths</td>
<td>6,200</td>
<td>5,000</td>
</tr>
<tr>
<td>Malaria in pregnancy death</td>
<td>0</td>
<td>141</td>
</tr>
</tbody>
</table>
Malaria in Pregnancy Policy

- Policy was formulated in 1998
- Adopted in 2001
- Guidelines and other implementation materials were developed in 2006
- The malaria in pregnancy policy was integrated in the general malaria control policy in 2011

NMCP Priority Interventions
1. Prompt and effective case management using ACTs at facility and community levels, supported by parasite-based diagnosis;
2. Use of Long Lasting Insecticidal Nets (LLINs);
3. Indoor Residual Spraying (IRS) starting with highly endemic and epidemic prone areas;
4. Landfilling and Environmental Control where appropriate;
5. Intermittent Preventive Treatment in pregnant women (IPTp);
6. Epidemic Preparedness and Response (EPR); and
7. IFRC/ICC, Monitoring, Evaluation & Research, and Health Systems Strengthening which cut across all the interventions

Malaria in Pregnancy Interventions
- Intermittent Preventive Treatment (IPTp) with SP as the current medicine of choice:
  - 1st dose in 2nd trimester,
  - 2nd dose in 3rd trimester
  - 3 doses (1 month apart in the HIV+ women starting in 2nd trimester),
  - or Cotrimoxazole continuation in HIV+.
- ITN use before, during, and after pregnancy.
- Effective case management according to guidelines to prevent severe malaria and deaths. (Tetraline in 3rd trimester, and ACTs in 2nd & 3rd trimester.
- Severe malaria treatment has changed from Iv Quin to Iv artesunate.

Partnerships and Stakeholders
- MIP is a joint implementation between MCP, RH, ACP, NGOs, and partners
- MCP is responsible for research & policy formulation, resource mobilization & advocacy, development of guidelines & materials, as well as M&E
- RH, ACP, and NGOs are responsible for core implementation: training, IEC, medicines & supplies management, as well as supervision.
- Partners are responsible for policy discussion and funding.

Partnerships and Stakeholders
- Thru the MIP working group and basic package
- JPHGO
- USAID foundations
  - NWMU (closed one year ago and was replaced by New Heights supported by Plan International)
  - PMT
  - JPHUG (Uganda Health Marketing Group)
  - IIP (Uganda Malaria Project)
  - Health partners
  - Medical Teams International
  - HIPS
- D4E foundations
  - Mek
  - WHO
- Championships
  - Uganda women parliamentarians, the speaker; the first lady, and Prof. Anthony K Mbiwe commissioner community health

<table>
<thead>
<tr>
<th>Activity area</th>
<th>Partner</th>
<th>Activity</th>
<th>Geographical location</th>
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</thead>
<tbody>
<tr>
<td>Malaria in pregnancy service area</td>
<td>Uganda Health partners</td>
<td>LLINs distribution</td>
<td>Selected districts of Northern Uganda</td>
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<tr>
<td></td>
<td></td>
<td>Advocacy &amp; community mobilization for IPTp and ANC MAT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support supervision</td>
<td></td>
</tr>
<tr>
<td>Support of corporate sector health facilities for comprehensive IPT services</td>
<td>HIPS</td>
<td>DO</td>
<td>All corporate health facilities nationwide</td>
</tr>
<tr>
<td>Malaria in pregnancy services in northern Uganda</td>
<td>New Heights Plus International</td>
<td>Prevention of safe water &amp; mosquito nets for DTT</td>
<td>Selected districts in Northern Uganda</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Buffers of IPT tablets</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training at IIP &amp; RECC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support supervision and monitoring</td>
<td></td>
</tr>
</tbody>
</table>
**Activity area**

<table>
<thead>
<tr>
<th>Malaria at pregnancy services in southern and central Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partner</strong></td>
</tr>
<tr>
<td><strong>Activity</strong></td>
</tr>
<tr>
<td><strong>Geographical location</strong></td>
</tr>
</tbody>
</table>

**Support of private sector health facilities including clinics, drug shops through the USMID network for Good Life Clinics**

| **USMID/AIDS** |
| Training of primary health providers on IPTp, early detection of malaria in pregnancy, and provision of DDTs for IPTp |

**USMID network Good Life Clinics**

---

**FANC Statistics**

<table>
<thead>
<tr>
<th>Major programme indicators</th>
<th>UDHS 2001</th>
<th>UDHS 2006</th>
<th>UNIS 2009</th>
<th>UDHS 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of ANC visits</td>
<td>1</td>
<td>2 or 3</td>
<td>4</td>
<td>4% (1-visit) 42.4% (2-3 visits) 47.0% (4+ visits)</td>
</tr>
<tr>
<td>No of months at 1st attendance</td>
<td>&lt;6</td>
<td>6-12</td>
<td>12-24</td>
<td>27.7% (0-6 months) 42.9% (6-12 months) 24.4% (12-24 months)</td>
</tr>
<tr>
<td>ITN use</td>
<td>7%</td>
<td>10%</td>
<td>43.7%</td>
<td>49.9%</td>
</tr>
<tr>
<td>% of total expected ITNs distributed</td>
<td>0%</td>
<td>18%</td>
<td>32%</td>
<td>28.7%</td>
</tr>
</tbody>
</table>

---

**IPT2 Performance**

![Graph showing IPT2 performance over years](chart.png)

---

**Progress**

- Integrated malaria control policy approved and signed April 2012. (Dissemination process is ongoing)
- 2 collaboration meetings held between NMCP, RHD, and 2 MIP stakeholders
- Had a malaria in pregnancy mission in September 2012 by WHO and PMI
- Trained 2,899 health workers on MIP and 2,345 in malaria case management
- Routine ANC LLIN distribution in 1,025 health facilities

**Lessons Learned**

- Availability of champions improves accessibility to funds.
- Integration of services results into optimal resource utilization.
- Involvement of the VHTs, especially for mobilization, improves quality and demand of ANC services.
- Applying operational research improves the quality of MIP services.
- The voucher system is useful in increasing the number of mothers that come for ANC.
- Last mile delivery model improved the availability of SP and therefore reduced stock outs.

---

**Developed a malaria research agenda that included malaria in pregnancy research topics**

- >94% of the health facilities reported no stock outs of SP 2011 and 2012
- Radio talk shows and spots aired, ANC LLINs stickers were distributed, and counseling guides were provided in 34 districts
- 1 data audit and 1 technical support supervision were conducted for malaria intervention (MIP inclusive)
- 187 private sector providers trained on MIP in the 6 UHMG supported districts
### Challenges
- Inadequate supply of malaria in pregnancy commodities (LLINs, purifying tabs, SP and other antimalarials)
- The insufficient human resource (numbers, availability, skills, motivation)
- The quality of data is very poor
- Lack of a common platform for FANC related activities and the weak collaboration/coordination of stakeholders.
- Inadequate funding of malaria in pregnancy activities like integrated support supervision, building capacity of HWs for MIP
- Non-availability of guidelines, job aids, and IEC materials for malaria in pregnancy in 78 districts
- Non-involvement of the community and the private sector
- Late reporting by the mothers for ANC

### Next Steps
- Re-constitute a FANC working group that brings together the three programmes (MIP, ANC, and PMTCT)
- Integrate and review all guidelines and training manuals that are used in ANC so that a single package is delivered
- Capacity building for all health care providers in 78 districts on MIP
- Universal coverage with LLINs and then routine ANC distribution
- Strengthen M&E to capture quality MIP data
- Quality assurance of ANC services

### Conclusion
- Integrating malaria services in MCH services is key to success of MIP programs
Annex 10: Tanzania MIP Presentation

PATH MiP Arusha Meeting
January 18th & 19th 2013
Improving Uptake of MiP Interventions - Tanzania Mainland

Country statistics
• Population approx. 45 million
• Total fertility rate 5.4
• Pregnancy 1.7 million/year
• MMR - 454/100,000
• IMR - 51/1,000
• U5MR - 81/1,000
• NMR - 26/1,000
• Anemia rate among PW - 53%
• ? The burden of MiP: estimated 1/5 (Indirect) cause of maternal death.
(Source: TDHS, THMIS, NBS)

MiP policy adoption and program history
• Started in 2000 together with FANC
• Interventions to increase use of ITN in pregnant women: Provide voucher for ITN during ANC visits
• IPTp services: 2 doses of SP during pregnancy at 20-24 and 28-32 weeks of pregnancy
• Streamline MiP effective treatment; within the National Malaria Diagnosis & Treatment Guideline & FANC Guidelines

Key Stakeholders
• MoHSW through;
  ➢ Reproductive and Child Health Services (RCHS), National Malaria Control Program (NMCP) & Pharmaceutical Supply Services (PSS)
• Implementing Partners;
  ➢ Jhpiego
  ➢ John Hopkins University
• Research Institutes;
  ➢ Muhimbili University of Health Sciences - MUCHS
  ➢ Ifakara Health Institute - IHI
• Bilateral & International Organizations;
  ➢ WHO and USAID/PMI

Key issues affecting IPTp (& ITN uptake)
• Commodity logistics: SP distribution challenges from central store to HFs
• Commodity [SP] misuse: to treat clinical cases at HFs level instead of IPTp
• Providers attitude: IPTp services taken lightly
• Field application: of IPTp schedules/ timing
• Inadequate community awareness: to create demand for IPTp services

FANC Quality & statistics
• ANC visit once - 96%
• ANC four or more visits - 43%
• Booked ANC before 16 weeks - 15%
• Received TT - 48%
• Received iron - 59%
2007
2011

Prevalence of Malaria in Children 6-35 months, 2007-2011

Current IPTP uptake (THMIS 2012)
- Took any antimalarial drug for prevention during her pregnancy
- Took any SP/Pfandre
- Took 2+ doses of SP/Pfandre
- Took 3+ doses of SP/Pfandre, at least one during ANC

Trends in Ownership of ITNs

Percent of households

Current use of ITNs (THMIS 2012)

- Percent who slept under a mosquito net the night before the survey

MiP - Management of malaria

Existing guidelines
- Treatment of uncomplicated malaria
  - 1st trimester: Quinine alone
  - 2nd and 3rd trimester: ACT

- Treatment of severe malaria: Inj. Quinine

Draft guidelines: by April 2013 onwards
- Treatment of uncomplicated malaria
  - 1st trimester: Quinine alone (option of combining with Clindamycin not endorsed)
  - 2nd and 3rd trimester: ACT

- Treatment of severe malaria: Inj. Artesunate

Supervision system
- Integrated in routine supportive supervisions of different levels:
  - District/council Health Management Team
  - Regional Health Management Team
  - National (RCH5, NMCP)
- Targeted supervision by Implementing Partners.
Advocacy and communication
- Continued education e.g. FANC, BEmONC, Integrated Community maternal, New born and child health
- IEC materials: on MiP at HF
- Mass media channels: National & regional TV & radio
- Campaign: Countrywide e.g. universal ITN access and others e.g. CARMMTZ, Wazazi nipendeni, TNVS; PWs and IVs

Monitoring and Evaluation
- Monitoring:
  - Through routine supportive supervision
  - Periodic reports from Districts/Councils (HF
  - Include commodity monitoring of SP for IPTp in SmS for life.
- Evaluation:
  - National representative surveys; evaluation on ITN + IPTp coverage (2 years interval between DHS and MIS)
  - Part of Program/Project evaluation of implementing institutions/partners.

LESSONS learned and Best practice
- Implementation of Universal access on ITN quickly improved performance; MiP indicator on ITN coverage & use
- A lot remain to be done with regard to IPTp low coverage. – address the observed challenges/MiP joint (NMCP+RCH+ Partners) task force
- Routine data on MiP burden continue to be hard to pin down/ ?.

Best Practices-2
- Integrated Safe Motherhood campaign (IPTp, nets, PMTCT, IBP, )
  - With SMS Platform – pregnant woman reminders
  - Tied to health facilities – IBP, SP Reminder Card, pregnancy wheels
- Integrated community maternal newborn & child health; developed and in use thru VWH
- Community level IPC through CCAs (Malaria interventions)

Best Practices-3
- Draft; Private sector Case management
- Pre-service involvement (malaria intervention)

Thank you for listening
Annex 11: General Guidelines for Draft Country Plans

Program Components:

- Policy
- Integration
- Commodities
- Capacity development
- Community engagement
- Quality improvement
- Monitoring and evaluation
- Financing
- Research

The components include elements such as protocols, IEC/communication materials, complimentary nutritional interventions, etc.

Summarize the challenges and or bottlenecks identified in your presentations or discussions from yesterday’s session. You can list them from your presentations:

Highlight up to 5 priorities for program actions:

For each priority challenge, propose an objective (what do you want to achieve/improve), a strategy and activities. For example, to improve access to ITNs a strategy could be to propose free distribution to pregnant women.

Example:

**Objective 1**

<table>
<thead>
<tr>
<th>Strategy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td></td>
</tr>
<tr>
<td>Indicators</td>
<td></td>
</tr>
</tbody>
</table>

For each objective and activity discuss who will be responsible, what resources will be needed and what time line will be needed to achieve the objective.