

WHO Malaria Policy Advisory Committee (MPAC) meeting

MAY 2020

MEETING REPORT

SUMMARY

On 13–14 May 2020, the World Health Organization (WHO) Malaria Policy Advisory Committee (MPAC) convened virtually to review updates and progress, and to provide guidance on thematic areas of work by the Global Malaria Programme (GMP).

The virtual meeting focused on three topics in six sessions: 1) an update on the classification of insecticide-treated net (ITN) products; 2) an update on the “High burden to high impact (HBHI)” approach including pillar 2: use of strategic information to drive impact; and 3) a report on the WHO technical consultation to review the role of drugs in malaria prevention for people living in endemic settings. Brief updates on the RTS,S Malaria Vaccine Implementation Programme and malaria elimination were included in the report from the Director.

The key conclusions of MPAC to GMP included:

- **RTS,S Malaria Vaccine Implementation Programme (Director’s update):** MPAC commended the progress made by the Malaria Vaccine Implementation Programme and endorsed the priorities outlined for the next six months. Concerns were raised in the closed session about the approach to analysis being undertaken by a partner organization for the qualitative longitudinal Health Utilization Study (HUS), which appears to be extracting and analysing data from countries before the respective evaluation partners have analysed it. MPAC members agreed with the suggestion that the country analysis should be undertaken first, followed by cross-country comparison.
- **Malaria elimination and certification manual (Director’s update):** MPAC strongly endorsed the publication of the *Preparing for certification of malaria elimination* operational manual and suggested that the

Malaria Elimination Certification Panel continue working to identify deficiencies that could lead to denial or postponement of elimination together with strategies to mitigate those deficiencies.

- **Classification of ITN products:** MPAC appreciated the efforts to seek broad, transparent input from stakeholders and recognized both the complexity of the issue and the need to be pragmatic in moving forward with the evaluation process. There were differences of opinion among members as to whether further attempts should be made to gain consensus on the classification from stakeholders or whether to proceed with this classification scheme as a pragmatic solution. In light of the public health need for the deployment of new vector control tools and the extensive consultation already undertaken by GMP, MPAC agreed to go ahead with the proviso that the classification would be reviewed again in the future once data to inform such a review are available. MPAC requests at least annual updates on the data available to update this classification.
- **HBHI approach:** MPAC congratulated the HBHI team on the progress made in the last year and particularly in the last three months in the context of the COVID-19 situation. The Committee highlighted the approach as a good example of focusing on an issue and dedicating the resources to implement it. MPAC members' comments focused on six main topics, which led to a rich discussion: political will, strategic information, community engagement, capacity building, an integrated approach including multisectoral engagement, and COVID-19.
- **Role of drugs in malaria prevention:** MPAC endorsed the report of the technical consultation and the plan to create a Guideline Development Group (GDG) to develop more flexible guidance that can help countries overcome barriers to innovation and the implementation of chemoprevention. MPAC encouraged GMP to consider developing guidance for implementing countries and their partners that includes key elements of evaluation design, essential data to collect, and how to report implementation and outcomes consistently across settings. MPAC recommended convening a discussion to clarify terminology around chemoprevention, especially that of mass drug administration (MDA), which encompasses at least three distinct purposes: 1) reducing burden when a health system is overwhelmed; 2) preventing mass relapse in the context of *P. vivax* elimination programmes; and 3) accelerating progress towards the interruption of transmission.

BACKGROUND

The World Health Organization (WHO) Global Malaria Programme (GMP) convened the Malaria Policy Advisory Committee (MPAC) for its 17th meeting via a virtual platform on 13–14 May 2020. MPAC generally convenes twice annually in Geneva to provide independent strategic advice to WHO on policy recommendations for malaria control and elimination. GMP had been exploring the possibility of holding one virtual MPAC meeting per year and took this opportunity to test the feasibility. Over the course of the two-day meeting, 14 MPAC members, one national malaria control programme manager, the WHO Secretariat and over 93 observers discussed updates and progress in the work areas presented. The Committee discussed conclusions and recommendations to GMP in the final closed sessions of each day.

The meeting participants were reminded of the procedures governing WHO's assessment of MPAC members' declarations of interest. All 14 MPAC members attending the meeting submitted their declarations of interest, which were assessed by the WHO Secretariat. Nine members reported relevant conflicts of interest, but none were relevant to the topics for decision on the agenda. A due diligence search was undertaken and found nothing significant that had not already been declared by the MPAC members.

UPDATES FROM THE GLOBAL MALARIA PROGRAMME

The GMP Director opened the meeting by reflecting on the COVID-19 pandemic and managing uncertainty in the current environment around the impact in Africa, funding for global health, development partners, social impact, service disruptions, and economic impact as it evolves. Recognizing the need for enhanced collaboration during this time, GMP has worked to collaborate with partners across seven workstreams: 1) clinical trials with antimalarials and product development; 2) surveillance and clinical epidemiology; 3) supplies and commodities; 4) malaria response and guidance; 5) communications; 6) coordination; and 7) resource mobilization. Key documents produced through the collaboration with partners so far include *Tailoring malaria interventions in the COVID-19 response*, which contains guidance on the prevention of infection through vector control and chemoprevention, testing, treatment of cases, clinical services, supply chain and laboratory activities; and *The potential impact of health service disruptions on the burden of malaria: a modelling analysis for countries in sub-Saharan Africa*. The modelling analysis found that under the worst-case scenario in which all insecticide-treated net (ITN) campaigns are suspended and there is a 75% reduction in access to effective antimalarial medicines, 769 000 people in sub-Saharan Africa could die from malaria this year alone.

Other topics included in the report were highlights from the *World malaria report 2019*, showing that progress has continued to stall in the trends of malaria cases and death, and identifying limited funding and coverage gaps. Eliminating countries are continuing to make progress, and the *Global technical strategy for malaria 2016–2030 (GTS) 2020* milestones for eliminating indigenous malaria transmission and prevention of re-establishment are expected to be met. The Director highlighted the work of the “High burden to high impact (HBHI)” approach and touched on the stratification work that is moving from a one-size-fits-all approach to a tailored, data-driven response that uses the best mix of interventions to achieve maximum impact, as covered in more detail in Session 4.

Other updates included the development of the consolidated Malaria Guidelines, which will assemble all WHO recommendations for malaria control and elimination in one document and provide enhanced guidance to countries to maximize the impact of available resources. Over the coming 18 months, GMP expects to convene Guideline Development Groups (GDG) to review the available data to update and develop new recommendations in multiple technical areas: vector control, elimination, chemoprevention, treatment, diagnosis, *P. vivax* and anaemia.

Brief updates were provided on the progress of the ongoing Malaria Vaccine Implementation Programme (MVIP), which celebrated its one-year anniversary of vaccine launch in April. Approximately 65% of the target population have received dose one, which is considered good for a new vaccine delivered to new contacts. Data collection through community mortality surveillance and sentinel hospital systems is ongoing, the latter showing lower meningitis rates than expected. The target timelines for policy review remain unchanged and are scheduled for early 2021.

A new operational manual on *Preparing for certification of malaria elimination* will be published, providing countries with expanded guidance on certification and subnational verification. It provides tools to help countries organize the required documentation, develop the national elimination report and assess the programme to prevent re-establishment of malaria transmission. El Salvador has already submitted an official request for certification, while Azerbaijan and China are expected to request WHO to certify their malaria-free status in 2020. However, the COVID-19 pandemic will present a challenge to countries in completing their preparations and to WHO in carrying out certification missions. The publication of the final report of the Strategic Advisory Group on malaria eradication (SAGme) in April with an accompanying statement from MPAC was highlighted.

The Director noted that a process will be undertaken to review the *Global technical strategy for malaria 2016–2030* to ensure linkage with the latest policy recommendations and technical guidance. At this stage, the goals, milestones and targets will remain unchanged. Anticipated updates include feedback from Member States and partners through a survey and regional convenings, the incorporation of SAGme conclusions, experience with the HBHI approach and the prioritization of intervention mixes, impact projections, and an updated costing analysis. GMP looks forward to engaging broadly throughout this process.

In closing, three high-level questions were proposed, not to be tackled during the meeting, but to provoke thinking on how the malaria community can anticipate the challenges to its collective goals posed by the COVID-19 pandemic and how best to support countries: How will COVID-19 impact the achievement of the GTS milestones and targets? What should the *World malaria report 2020* look like – acknowledging the need to report back against the 2020 milestones and also the efforts required by countries to collect and report the necessary data? Is there a need to rethink malaria control and elimination in a COVID-19 environment? GMP will engage Member States and partners to consider these topics in the coming months.

MPAC conclusions: MPAC congratulated the Director and the GMP team on their work to bring partners together during the COVID-19 pandemic to coordinate malaria-related work across the multiple workstreams. The discussion and recommendations from MPAC focused on two technical areas included in the Director's update: the MVIP update and the *Preparing for certification of malaria elimination* operational manual.

MPAC commended the progress made by the MVIP and endorsed the priorities outlined for the next six months. Concerns were raised in the closed session about the approach to analysis being undertaken by a partner organization for the qualitative longitudinal Health Utilization Study (HUS), which appears to be extracting and analysing data from countries before the respective evaluation partners have analysed it. MPAC members agreed with the suggestion that the country analysis should be undertaken first, followed by cross-country comparison. WHO is grateful that the concern was raised and is working with partners to address the issue.

MPAC strongly endorsed the publication of the *Preparing for certification of malaria elimination* operational manual and suggested that the Malaria Elimination Certification Panel continues working to identify deficiencies that could lead to denial or postponement of elimination together with strategies to mitigate those deficiencies.

SUMMARY OF THE MPAC SESSIONS

Update on the classification of ITN products and associated evaluation procedures

Background: WHO has identified inconsistencies among its communication on the evaluation process for vector control interventions, recent communication on policymaking in the area of malaria and the application of these processes in practice. In February 2020, GMP published a notice of intent to modify the classification of ITN products and associated evaluation procedures. A question and answer document summarized the feedback received by GMP, and a revised ITN classification was developed with the aim to balance the public health need for the deployment of new vector control tools with WHO's responsibility to provide evidence-based guidance to its Member States.

The proposed new ITN classes are:

1. ITNs designed to kill host-seeking insecticide-susceptible mosquito populations that have demonstrated public health value compared to untreated nets and whose entomological effects consist of killing and reducing the blood-feeding of insecticide-susceptible mosquito vectors: Existing prequalified pyrethroid-only nets. Policy recommendation in place.
2. ITNs designed to kill host-seeking insecticide-resistant mosquitoes and for which a first-in-class product has demonstrated public health value compared to the epidemiological impact of pyrethroid-only nets: This class is provisionally thought to include both insecticide treatments with active ingredients other than pyrethroid-based formulations and nets with synergists. It includes pyrethroid-PBO nets that are currently covered under an interim WHO policy recommendation, pending results of trials to demonstrate public health benefits in at least two study sites. The class would be expanded to include pyrethroid + chlorfenapyr nets once their public health value has been demonstrated by means of at least two geographically separate epidemiological trials. The class would then be expanded to also include other products with the same entomological effect but with different chemical modes of action to pyrethroid-only nets without the need for further epidemiological trials.
3. ITNs designed to sterilize and/or reduce the fecundity of host-seeking insecticide-resistant mosquitoes for which a first-in-class product has demonstrated public health value compared to the epidemiological impact of pyrethroid-only nets. This class is provisionally thought to include pyrethroid + pyriproxyfen nets and will be created once the public health value of a first-in-class ITN product containing an insect growth regulator has been demonstrated by means of at least two geographically separate epidemiological trials.

Once the classes have been defined, implementation of the revised classification will include a revision of the ITN testing guidelines to facilitate a comprehensive evaluation of nets other than pyrethroid-only products. There is a need to identify and close existing data gaps on the new types of nets currently prequalified, which is already being undertaken by the WHO Prequalification Vector Control Team. WHO documentation on the evaluation process will be updated to reflect the changes to the ITN classification, and a process will be established to define similarities for existing and future ITN products. WHO anticipates the need to review the ITN classification within a three-year period to establish whether the revised classification continues to capture the available

products and those under development, and whether there may be opportunities to further simplify the classification.

MPAC conclusions: MPAC appreciated the efforts to seek broad, transparent input from stakeholders and recognized both the complexity of the issue and the need to be pragmatic in moving forward with the evaluation process. The Committee also noted that the classification may need to be revisited when data from ongoing trials investigating the epidemiological impact of different types of new nets become available. MPAC pointed out that using the definition of product class as a group of nets that show a common entomological effect would result in no distinction between the proposed classes 1 and 2, both of which are focused on the killing effect on mosquitoes. Some members of MPAC expressed the view that it would be better not to separate 1 and 2 as different product classes, but rather to distinguish them as sub-classes based on the current need for epidemiological trials to understand the comparative performance of second-generation ITNs compared to pyrethroid-based ITNs. There was also a broader discussion around the potential limitation of the term ITN in light of the rapid advances in the types of products using a net as the delivery mechanism and their various modes of action. It was pointed out that the proposed classification describes the present ITN options and could potentially lead to a proliferation of new net classes due to referencing pyrethroid-only nets (or any other insecticide as mosquitoes develop resistance) as the comparator.

There were differences of opinion among members as to whether further attempts should be made to gain consensus on the classification from stakeholders or whether to proceed with this classification scheme as a pragmatic solution. In light of the public health need for the deployment of new vector control tools and the extensive consultation already undertaken by GMP, MPAC agreed to go ahead with the provision that the classification would be reviewed again in the future once data to inform such a review are available. An issue that was not addressed was the process by which the performance of products within a class will be assessed and their comparative performance to the first-in-class product verified.

Prior to the implementation of the new categorization of classes, the procedures and criteria for the entomological evaluation of ITN products other than pyrethroid-only nets will need to be established by WHO and clearly communicated. MPAC requests at least annual updates on the data available to update this classification. MPAC also identified the need to strengthen entomological capacity, particularly at the subnational level, in anticipation of new challenges to vector control and the development and deployment of new types of vector control products.

Update on the “High burden to high impact (HBHI)” approach

Background: The HBHI approach is a targeted malaria response in the 10 highest burden countries in Africa and India that reaffirms commitment and refocuses activities – initially in the highest burden countries – to accelerate progress towards the GTS goals through four response elements: political will to mobilize domestic resources and reduce malaria deaths; strategic information to drive down the burden; better guidance for more targeted and efficient use of resources for optimal impact; and coordinated response. These elements build on a foundation of effective health systems and involve a multisectoral response. The guiding principles for the approach are that the approach is country-owned and country-led to provide better coordinated support from in-country and external partners, commitment from partners to share and jointly analyse the data for action, and support for enhanced domestic and international resource mobilization. The two presentations in this session focused on 1) the overall progress in implementing the approach in the 11 high-burden countries and 2) the implementation of pillar 2: strategic information.

Initial country meetings involving all relevant country stakeholders were held in nine of the 11 countries; the high-level meetings in the United Republic of Tanzania and Mali have been postponed due to the COVID-19 pandemic. Key points made during these meetings included that the HBHI approach is not business as usual and represents a paradigm shift in malaria control; the importance of the right mix of interventions based on local evidence and stratification; and the need to link to the health sector plan and contribute to health systems strengthening. The presentation highlighted potential challenges that countries may face in maintaining malaria services should they experience widespread COVID-19 transmission and proposed some country-level responses that WHO and partners could consider to support countries. Key activities for the remainder of the year were outlined, including advocacy and technical support for the continuity of malaria services; technical support for malaria programme reviews, national strategic plan updates and funding proposals; development of a tracking tool for monitoring the response; training workshops if feasible; and documentation/dissemination of best practices.

The second presentation focused on pillar 2: use of strategic information for impact. GMP has been supporting countries to use their data to inform malaria programme reviews, update national strategic plans, prioritize resources, and for service delivery and monitoring. The support is based on the establishment of national data repositories that draw on routine national data from inpatient/outpatient registers, intervention coverage and stock management, together with other available data from surveys, entomological data, and information on drug efficacy and resistance, funding, human resources and commodities to trigger subnational planning and action. In advance of preparing funding proposals, GMP published the *WHO technical brief for countries preparing malaria funding requests for the Global Fund (2020–2022)*, which promotes the use of subnational data to optimize the mix of malaria interventions.

The presentation walked through an example of using stratification to define the optimal mix of interventions in Ghana and emphasized the need to define a microstratification strategy in urban areas. Another example showed how impact can be modelled to support decision-making based on funding request scenarios. Challenges associated with supporting countries to implement the HBHI approach can be categorized as logistical, technical or strategic. Among logistical challenges are the time available to support countries in advance of the submission of funding proposals and coordination, which will in part be solved when capacity exists at national and subnational levels. Technical challenges include the establishment of the national data repositories, development of guidance on urban microstratification, and capacity for analytical support. Finally, strategic issues include the need to bring partners on board with this paradigm shift, alleviation of structural and process bottlenecks to ensure that analyses are available to support decision-making, and evolution of malaria programme reviews to include problem-solving at the subnational level. Next steps to address these challenges in the coming months were outlined.

MPAC conclusions: MPAC congratulated the HBHI team on the progress made in the last year and particularly in the last three months in the context of the COVID-19 situation. The Committee highlighted the approach as a good example of focusing on an issue and dedicating the resources to implement it. MPAC members' comments focused on six main topics, which led to a rich discussion: political will, strategic information, community engagement, capacity building, an integrated approach including multisectoral engagement, and COVID-19.

Political will to eliminate malaria countrywide should not be limited to the will of stakeholders at the highest national level, such as the president and minister of health. Political will is required to influence decisions linked to malaria elimination efforts,

including efforts to address bottlenecks such as continuous training of health personnel at all levels and the availability of ITNs, diagnostic tests and antimalarials at all service delivery points.

MPAC emphasized the importance of including data from ethnographic and other qualitative studies on local practices that affect malaria risk (e.g., time to bed, seasonality in activities that might place people at risk, etc.) to help subnational targeting of appropriate interventions and the development of new context-specific interventions. MPAC members were assured that qualitative data, where available, were included in the stratification, intervention mixes and impact models. MPAC further noted that it would be useful to make this explicit in presentations to help reinforce the value of these data for microstratification, particularly with the new focus on urban areas, which was welcomed by MPAC. The Committee underscored the importance of stratification mapping not only for epidemiological data, but also for indicators such as vectors, insecticide resistance, population density and climate to enable countries to use their data for decision-making. MPAC strongly supports the HBHI approach, which encourages countries to move away from “business as usual” and a “one size fits all” approach.

MPAC noted that, to be effective, community engagement needs to be a two-way process. The Committee expressed concern that perhaps less effort is being put into drawing on what is known about the barriers and challenges that communities face in accessing services in specific contexts. “Engagement” is not just about engaging communities in what we think they should be doing, but rather understanding what they are doing and most importantly why. MPAC recommends that community engagement be further developed in the HBHI approach.

MPAC members were very concerned about the lack of expertise and capacity at national and subnational levels to undertake the stratification analysis and effectively implement the plans developed through microstratification. MPAC noted that this deficiency will become even more critical as countries achieve the expected impact and move towards subnational elimination of malaria. This issue requires urgent attention as it has implications for the success of the HBHI approach in the medium to long term. MPAC recommended that sustainable solutions to build capacity be undertaken to support all countries, including efforts to facilitate and encourage strong partnership between national malaria programmes and local academic institutions. MPAC was assured that this approach is part of the HBHI strategy and efforts will continue moving forward. An additional challenge noted was ensuring that once staff are trained, they have the tools available to implement the skills learned. Part of the HBHI approach, in the process of being implemented, is to support the establishment of national data repositories with analysis tools to enable such work at both the national and subnational levels.

MPAC called out the importance of ensuring that the HBHI approach is integrated within the primary health care strategy, including malaria interventions that require implementation at the community level. MPAC noted that community-level service delivery has been a major contributor to many countries reaching elimination, and the challenges faced by community health workers, who often support multiple disease programmes, need to be considered as part of the HBHI approach. MPAC recommended that the HBHI approach strengthens its coordination with other sectors and the national malaria programmes in the 11 countries. However, it was noted that a multisectoral approach requires strong political will to involve other sectors in the fight against malaria.

Finally, MPAC highlighted the need for continued advocacy and technical support to ensure continuity of malaria services in the context of the COVID-19 response. This emerging issue is of concern particularly with the onset of the peak malaria transmission season. People may be reluctant to visit health facilities out of fear of COVID-19, whose clinical presentation may overlap with clinical malaria. This issue needs to be addressed to avoid an increase in malaria deaths, rolling back the gains made over the years. In the context of the COVID-19 pandemic, health services at all levels should keep running to avoid a situation in which the morbidity and mortality of other diseases increase.

WHO technical consultation to review the role of drugs in malaria prevention for people living in endemic settings

Background: On 16–17 October 2019, GMP convened a technical consultation to review the use of medicines for malaria prevention in endemic countries and to identify opportunities to increase their impact by reviewing the flexibility of the recommendations for their deployment. Experts reviewed the policies and use of chemoprevention as currently endorsed by WHO, including intermittent preventive treatment in pregnancy (IPTp), intermittent preventive treatment in infants (IPTi), seasonal malaria chemoprevention (SMC) and mass drug administration (MDA) for the reduction of disease burden in emergency situations. By reviewing these strategies side-by-side for the first time, the meeting was able to consider opportunities for optimization. Additional potential applications of chemoprevention were also reviewed and key considerations identified to develop a broader role for malaria chemoprevention in malaria-endemic populations.

Key conclusions of the meeting included:

- There is a need for general guidance on the broader use of chemoprevention.
- Chemoprevention strategies may be tailored to country-specific needs.
- Integration of chemoprevention into existing platforms is encouraged wherever possible (e.g., IPTi and immunization services, IPTp and antenatal care packages).
- Additional approaches to boost coverage should be considered if there is no fit-for-purpose platform and to extend coverage to those not accessible through existing platforms.
- Countries should be supported to tailor strategies and adapt the mix of interventions according to their malaria control/elimination needs and context.
- Monitoring the impact of chemoprevention strategies is critical to understand their value in different contexts and to inform the development of future guidance.
- Research and development of new malaria drugs should place greater emphasis on their potential use for chemoprevention

MPAC conclusions: MPAC endorsed the report of the technical consultation and the plan to create a GDG to develop more flexible guidance that can help countries overcome barriers to innovation and the implementation of chemoprevention. MPAC encouraged GMP to consider developing guidance for implementing countries and their partners that includes key elements of evaluation design, essential data to collect, and how to

report implementation and outcomes consistently across settings. This effort should support the enhanced capacity of national malaria programmes and their local partners. GMP should consider framing the guidance around the four levels articulated in the guidance document it developed to support countries seeking resources from the Global Fund, clearly distinguishing the core recommendation from good practice statements, opportunities for country (or subnational) adaptation, and additional considerations, such as when to introduce and stop chemoprevention interventions.

MPAC recommended convening a discussion to clarify the terminology around chemoprevention, especially that of MDA, which encompasses at least three distinct purposes: 1) reducing burden when a health system is overwhelmed; 2) preventing mass relapse in the context of *P. vivax* elimination programmes; and 3) accelerating progress towards the interruption of transmission. MPAC encourages GMP and the chemoprevention GDG to emphasize the importance of integration within broader health system platforms to enable mutual reinforcement of multiple strategies and promote sustainability. MPAC noted that, in developing the broad guidance for chemoprevention and MDA intervention strategies, there should be due consideration of the potential purposes, target populations, issues around choice of drug and dose, timing and operational methods to be utilized. MPAC recognized that the use of ACTs for chemoprevention and/or MDA is not ideal because they contain one drug with a short half-life and a partner drug with a long half-life which could accelerate the development of resistance. The Committee acknowledged that there is currently a lack of alternative drugs better suited to these strategies and endorsed GMP's intention to encourage the development of appropriate drugs for chemoprevention.

All documentation related to this meeting can be found at:
<https://www.who.int/malaria/mpac/apr2020/en/>

All previous MPAC meeting reports can be found here:
http://www.who.int/malaria/mpac/meeting_reports/en/

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