Before, during and after the World Health Organization (WHO) Global Forum of malaria-eliminating countries in San José, Costa Rica, from 11–13 June 2018, the Malaria Elimination Oversight Committee (MEOC) engaged for the first time with representatives from countries identified by the WHO as having the potential to eliminate malaria by 2020 (known as E-2020 countries). The MEOC members met with WHO regional malaria advisers, inter-country support team staff and elimination focal points prior to the start of the Global Forum to receive briefings on all E-2020 countries. MEOC members participated in the Global Forum, interacting formally with country participants during the discussion session following each country presentation and informally at breaks. On the last day of the Global Forum, the MEOC provided draft recommendations, which were further refined during an afternoon session on 13 June that included discussion on strategies for how the MEOC will help countries reach elimination.

Key conclusions and recommendations are summarized below:

- The MEOC members successfully introduced themselves and their terms of reference to the E-2020 countries.

- The MEOC appreciated the quality of the Global Forum meeting and congratulated participants for their achievements and presentations.

- The MEOC recommended that the Global Forum promote and celebrate milestones at its meetings. The MEOC celebrated with Paraguay upon its 2018 WHO certification of malaria elimination that was delivered at the Global Forum by the Regional Director of the WHO Regional Office for the Americas, Pan American Health Organization (AMRO/PAHO). The MEOC congratulated the countries with important reductions in 2017 caseloads compared with 2016 (Iran [the Islamic Republic of], Malaysia, the Republic of Korea, Saudi Arabia, Suriname and Timor-Leste) and the countries reaching or maintaining zero indigenous cases in 2017 (Algeria, China and El Salvador).
The MEOC was concerned to learn that several E-2020 countries had experienced important increases in numbers of indigenous malaria cases in recent years, while others had made no significant progress in reducing such cases despite several years of working toward elimination. The MEOC recommended that countries and the WHO ensure that increases in indigenous cases be identified early and that investigations be conducted quickly whenever case increases are reported. For countries that are not progressing, the MEOC recommended that program audits be conducted by national programmes and the WHO. The MEOC recommended that the WHO explore sources of potential support and funding to combat resurgences.

Cross-border issues were a major theme for almost all countries, each with unique characteristics. The MEOC committed to following this complex and multi-faceted issue closely. The MEOC recommended that the WHO explore new modalities for scaling up cross-border coordination and collaboration with neighboring countries to treat these areas holistically and fairly, using the “Special Intervention Zone” concept developed for onchocerciasis elimination.

All people and groups at risk of malaria in eliminating countries must be able to access prevention, diagnosis and treatment services. The MEOC recommended that national programmes analyze barriers to accessing preventive measures as well as diagnosis and treatment, including discrimination, culture, distance, cost, working hours, legal status, etc., for at-risk groups and develop specific plans to address each, and requested a report on high-risk groups from each eliminating country at the next Global Forum.

The usefulness of independent national elimination advisory committees in other disease elimination programs was noted. The MEOC endorsed the existing recommendation by the WHO for eliminating countries to establish these committees and recommended that the WHO actively assist countries to set up these committees.

Malaria cases diagnosed and treated in the private sector must be included in the surveillance system in malaria-eliminating countries. Regulations for mandatory case reporting are essential. The MEOC recommended that the private sector be included in elimination training, diagnosis, treatment and surveillance to facilitate their reporting to the national programme.

The MEOC recommended that the WHO develop criteria for additional countries to be included in the E-2020 initiative and to attend the Global Forum. The MEOC also recommended that the WHO invite countries certified in 2016 and beyond to future Global Forums.

**BACKGROUND**

The Malaria Elimination Oversight Committee (MEOC) was established by the World Health Organization (WHO) based on a recommendation by the Malaria Policy Advisory Committee at its March 2017 meeting, and has been modelled after similar committees supporting global eradication of polio and dracunculiasis, and regional elimination of onchocerciasis. The purpose of the MEOC is to support the WHO to monitor and guide global malaria-elimination activities as part of a transparent, responsive and effective approach to malaria elimination in countries and regions actively pursuing that goal. The WHO Global Malaria Programme convened the MEOC for its first meeting in Geneva, Switzerland, on 10 April 2018. The MEOC will review progress toward elimination and the quality and coverage of malaria-elimination strategies in order to provide recommendations on how to accelerate elimination and prevent re-establishment of transmission.
The MEOC participated in its second meeting in June 2018 in conjunction with the Global Forum of malaria-eliminating countries in San José, Costa Rica. The MEOC attended the Global Forum from 11–13 June. The MEOC meetings, chaired by Dr Frank Richards, were divided into three sections: a half-day meeting on 10 June to deliberate on how the MEOC could best provide support to malaria-eliminating countries, a working dinner on 12 June to develop preliminary recommendations that were presented to the Global Forum on the morning of June 13, and a half-day session in the afternoon of 13 June to finalize recommendations. Eight of the 10 full MEOC members participated in the MEOC meetings and the Global Forum, along with two adjunct MEOC members from Suriname and South Africa representing the eliminating countries (see annex for list of participants).

The presentations and discussions held at the Global Forum, which informed much of the MEOC recommendations, are summarized in the meeting report of the Global Forum (http://www.who.int/malaria/meetings/2018/second-global-forum-elimination/en/).

**MEOC MEETING PRE-GLOBAL FORUM, 10 JUNE 2018**

Preceding the Global Forum, the MEOC met with WHO regional malaria advisers, regional malaria elimination focal points, and inter-country support team advisers for a half-day session to review the agenda for the upcoming Global Forum and to receive briefings on the progress of eliminating countries from WHO staff. The Chair reminded MEOC members of the discussion during the inaugural meeting of the importance of MEOC introducing itself as an ally to eliminating countries during the Global Forum. The Chair also emphasized the importance of the MEOC using its terms of reference related to questioning the status quo to promote a culture of probing, learning and innovating.

Given the large number of malaria-eliminating countries attending the Global Forum (20), the time allocated for each country presentation (15 minutes) and discussion (15 minutes) was limited. The MEOC discussed the best way to use the discussion period to understand the limitations and challenges of each elimination programme. MEOC members met with WHO staff in sub-teams to discuss issues relevant for each eliminating country. After re-joining in plenary, the MEOC held a roundtable to review pertinent points from each country to begin identifying common themes that could be explored further during the Global Forum.

**MEOC MEETING POST-GLOBAL FORUM, 12 AND 13 JUNE 2018**

During the working dinner and the post-Global Forum half-day meeting, the MEOC debated the modalities of the MEOC’s role in assisting eliminating countries to reach zero indigenous malaria transmission to meet the elimination milestones in the *Global Technical Strategy for Malaria 2016–2030*. The MEOC presented draft recommendations to the Global Forum on June 13, and then further refined those recommendations during the afternoon meeting of the MEOC and the WHO Secretariat.

1. **MEOC role in supporting malaria-eliminating countries**

The MEOC heard from two members currently working on committees supporting polio eradication. An important lesson from these experiences was that countries should be met at their level, that is, the level of assistance provided to countries should be commensurate with both the country’s needs as well as its ability to act on recommendations. The MEOC decided it should focus on countries that need assistance to reach their elimination goals, where the intensity of MEOC engagement would be roughly proportional to the
country’s capacity to respond. An additional lesson taken from the polio experiences was the need to convene review meetings with only a few focus countries. These meetings should include a larger group of programme and Ministry of Health (MOH) staff via video conferencing to ensure that in-depth discussions could be held on all programmatic aspects. The MEOC recommended that during MEOC meetings not coinciding with the Global Forum, a limited number of focus countries should be invited for extensive program review by the MEOC. To allow MEOC members to develop deeper understanding of the structure, strategy, level and quality of implementation of activities, limitations, challenges and progress, MEOC members will be paired with two to five eliminating countries on which to focus their efforts. Apart from interactions with the MEOC, the eliminating countries can also learn from the experiences of other countries.

2. Stagnation and resurgences

The MEOC was concerned to see a number of eliminating countries experiencing resurgences in caseloads in 2017. Increases were particularly notable among the African countries included in the E-2020. The MEOC recommended that national programmes and the WHO should ensure that investigations are initiated early when increases are detected to identify the causes of rising caseloads and to initiate rapid responses to mitigate the situation. In addition, the MEOC recommended that there be national or regional support and funding that could be accessed rapidly to combat resurgences. The MEOC suggested that the WHO explore funding with the Global Fund to Fight AIDS, Tuberculosis and Malaria and other donors.

In addition to the resurgences, the MEOC noted that several other countries had reported multiple years with similar numbers of cases without progressing to elimination. The MEOC recommended that program audits quickly be conducted in these countries to end “business as usual” processes.

3. ‘Border’ malaria and cross-border collaboration

Cross-border issues were a major theme for almost all countries, each with unique characteristics. There are two major types of “cross-border” malaria, although with important overlaps: transnational malaria involves the movement of people infected with malaria parasites across international borders (whether land borders, ocean ports or airports) into the interior of the receiving country, whereas “border malaria” refers to foci of malaria transmission that physically cross international borders. Transnational malaria may result from either push (complex or humanitarian emergencies) or pull (economic opportunities) factors and may or may not affect the malaria situation directly along the international border. Both situations may improve with cross-border collaborations. The MEOC recognized the importance of cross-border issues and committed to following this complex and multi-faceted issue closely. The MEOC recommended that the WHO explore new modalities for scaling up cross-border coordination and collaboration with neighboring countries, particularly with respect to “border malaria,” to treat cross-border transmission foci holistically and fairly, using the “Special Intervention Zone” concept derived from onchocerciasis elimination. A framework for agreements and a catalog of existing signed agreements should be developed for malaria cross-border activities. Other multilateral organizations that deal with migration, such as the International Organization for Migration, could be helpful with understanding international law issues and in crafting useful agreements.

As part of cross-border agreements, the MEOC recommended that the type and frequency of information that is shared to facilitate malaria elimination should be determined, and new technology to facilitate information-sharing across international borders should be explored.
4. Political commitment and national malaria elimination advisory committees

To ensure and sustain broader national commitment and efforts toward malaria elimination, the MEOC recommended the involvement of the national legislature of countries concerned, particularly to provide political and financial support for the national malaria-elimination program, and to follow its progress. To this end, the MEOC recommended that, on a regular basis, governments should present progress reports to their national parliaments or equivalent institutions.

Countries that have been reporting low numbers of malaria cases for many years may not see a value in reaching zero indigenous cases for three years and completing the process of WHO certification. However, history has shown that significant resurgences can occur when countries fail to finish the last mile and the pressure to eliminate is removed. The MEOC recommended that the WHO help countries improve their internal communication of the benefits of achieving elimination and certification. The MEOC recommended that the WHO identify partners to assist in developing elimination “investment cases” for some countries to serve as a key advocacy tool to establish or maintain political will and the domestic resources required for the last push across the finish line, and for the ongoing investment required to prevent re-establishment.

The MEOC recommended that community involvement in malaria elimination efforts be strengthened. The MEOC noted that the WHO is working on a community engagement framework specifically focused on elimination efforts and requested a report at the next Global Forum.

The MEOC noted the importance of national malaria-elimination advisory committees in providing an independent view of progress and gaps in national malaria-elimination programmes and recommended that the WHO actively assist countries to establish these committees. Generic terms of reference have already been developed and shared with countries. The MEOC noted the importance of the potential role of such committees in the subnational verification of malaria elimination and strongly encouraged countries to consider actively pursuing subnational elimination verification as a way of increasing political engagement in elimination and maintaining gains achieved in some parts of the country. National malaria-elimination committees could reach out to sister malaria committees in bordering countries to promote cross-border collaboration.

5. High-risk populations

All people and groups at risk of malaria must be able to access prevention, diagnosis and treatment services. The MEOC recommended that countries analyze barriers to at-risk groups for accessing such services, including discrimination, culture, distance, cost, working hours, legal status, etc., and develop specific plans to address each. The MEOC requested reports on this analysis by countries at the next Global Forum.

Work sites and industries in malaria risk areas could be engaged by national committees or through regional advocacy approaches to ensure prevention, diagnosis and treatment services are available to their workers and their families at little or no cost. The MEOC recommended that the WHO identify partners who could advocate with important industries, including agriculture and mining, to actively engage in the national malaria elimination agenda.
6. Surveillance

Malaria cases diagnosed and/or treated in the private sector must be included in the surveillance system in malaria-eliminating countries. Regulations for mandatory case reporting are essential. The MEOC recommended that the private sector be included in elimination training, diagnosis, treatment and surveillance.

The MEOC recommended that eliminating countries align their entomological surveillance with WHO guidance provided in the new surveillance manual, particularly with regard to establishing the distribution of vectors to define receptivity, vector density monitoring to estimate seasonality of transmission and peak times and locations (indoor/outdoor) of biting as well as establishing insecticide resistance profiles and associated resistance mechanisms.

7. Operations research

The MEOC noted that operations research in elimination programmes is important, and time should be set aside at the next Global Forum as an opportunity for countries that might wish to provide short reports on their research efforts to address and solve key problems identified by their malaria-elimination programs.

8. Recommendations on the Global Forum of malaria-eliminating countries

Through direct observation and participation, and discussion with representatives of eliminating countries, the MEOC found the Global Forum to be a useful platform for sharing important experiences and lessons learned between countries facing similar challenges. The meeting also served as an opportunity to disseminate and discuss WHO elimination guidance documents. The MEOC recommended that the Global Forum continue to promote and celebrate milestones achieved by countries, as was done at the current meeting around the certification of Paraguay as malaria-free. In addition to certifications, the Global Forum should celebrate intermediate milestones such as reductions in caseloads and reaching and maintaining zero indigenous cases. The MEOC congratulated the countries with important reductions in 2017 caseloads compared with 2016 (The Islamic Republic of Iran, Malaysia, the Republic of Korea, Saudi Arabia, Suriname and Timor-Leste) and the countries reaching or maintaining zero indigenous cases in 2017 (Algeria, China and El Salvador).

The theme of the 2018 Global Forum was “Focusing on the Foci”, and the MEOC appreciated the keynote presentation on this subject by Dr Roberto Montoya (AMRO/PAHO). The MEOC fully supported the strategy of investigating the drivers of transmission in foci and the development of microplans to operationalize WHO guidance and strategies in foci. However, MEOC members thought the theme could have been further developed during the meeting and suggested that more details on foci should be presented at subsequent meetings. The MEOC also encouraged the WHO Secretariat to suggest to the MEOC creative ways to present Global Forum thematic topics in greater depth, notwithstanding the crowded agenda of country reports.

The MEOC recommended that the template provided to countries presenting on their progress at the Global Forum should include monthly reports of cases from the current
year compared with the same periods over the previous two years. More details on the national malaria information system and integration within the health management information system should be presented. The MEOC also recommended that countries should include information on important contextual factors such as political support, financing and funding gaps, and social, political, administrative and environmental elements.

Many countries actively pursuing malaria elimination are not included in the E-2020 initiative. The MEOC recommended that the WHO develop, in consultation with members of the MEOC, criteria for including additional countries in the E-2020 initiative and the Global Forum. The MEOC also recommended that the WHO invite countries certified after 2016 to attend the Global Forum to share their experiences and lessons learned, and to emphasize the importance of continued post-elimination surveillance and prevention of re-establishment of transmission after certification.

**Endnotes**

1. For example, see Gustavsen K, Sodahlon Y and Bush S. Cross-border collaboration for neglected tropical disease efforts – Lessons learned from onchocerciasis control and elimination in the Manu River Union (West Africa). Globalization and Health 2016 12:44.

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All documentation related to this meeting can be found at: http://www.who.int/malaria/areas/elimination/advisory-committees/en/

To sign up for news and updates from the WHO Global Malaria Programme, please visit: http://www.who.int/malaria/news/sign_up_form/en/