I. Introduction

The last decade has witnessed unprecedented progress in the reduction of the global burden of malaria. A massive increase in resources has led to a considerable intensification of efforts with increased access to and coverage of key interventions. In the Americas, 7 of 21 countries with endemic malaria are in the pre-elimination phase. Nevertheless, there is still a long way to go to achieve malaria elimination, and the ultimate goal of eradication, with the emergence of new challenges such as parasite resistance to artemisinin and vector resistance to insecticides. To meet these new challenges and to take into account the increasing heterogeneity of malaria, the Malaria Policy Advisory Committee (MPAC) supported the idea that the WHO Global Malaria Programme develop a Global Technical Strategy for Malaria: 2016 to 2025 (GTS), to guide countries and regions in their efforts to accelerate toward malaria elimination in the next decade. To ensure that countries and partners will embrace and implement this Strategy, the development process is being conducted in an inclusive manner with the participation of Member States and key partners involved in the fight against malaria in all regions. It is in this context that the Global Malaria Programme, in collaboration with the Pan American Health Organization / WHO Regional Office for the Americas (PAHO/AMRO), organized a regional consultation for countries in the Americas from 1-2 April 2014, in Panama City, Panama. The document reviewed at this meeting was 4 March 2014 version of the Global Technical Strategy document.

Objective

The objectives of this consultation were to introduce the working draft of the Global Technical Strategy for Malaria: 2016-2025 to participants, seek participant input on all aspects of the document (content, structure, process of development) and establish consensus on key recommendations to be forwarded to the Global Malaria Programme.

Expected results

The expected result is to achieve consensus on recommendations from the meeting participants to the Global Malaria programme on different aspects of the GTS to strengthen the document and improve its utility for the region.

Welcome and opening remarks

The meeting was opened with remarks from four presenters; key excerpts are noted:

1. Dr Monica Guardo representing Dr Federico Hernández-Pimentel, PAHO Representative in Panama
   In thinking about the development and implementation of this strategy, there are two key challenges for this region which we must keep in mind and hopefully find ways to address:
   - Indigenous communities – understanding the needs and challenges of these communities and reaching them with interventions
   - Border areas – accessing these areas which are often remote, hard to reach, and often located in dense jungle or in areas involved in guerrilla warfare

2. Dr Zelibeth Valverde representing Dr Carlos Galvéz, Director General for Health, Ministry of Health of Panama
   Input from this region will be important in two ways: 1) regional input will contribute to the global plan and lay the groundwork for the regional plan (and we want the GTS and GMAP2 to reflect the needs of the region) and 2) this region will contribute significantly to the elimination of malaria. There are great challenges for our region: indigenous populations,
border areas, mobile populations. But this region will lay the groundwork for what could be the future of malaria in the rest of the world.

3. Dr John Reeder – Director of the Global Malaria Programme at WHO
The expectation for this meeting is to have a conversation. We have brought this document here for a broad discussion, and the document will almost inevitably look very different at the end of this process. This should be a global strategy, reflecting all regions, but also a mirror in which we can look and see ourselves, from whichever region we come, and see how we are contributing to the work to eliminate malaria.

4. Dr Luis Gerardo Castellanos, Unit Chief, Neglected, Tropical and Vector Borne Diseases, PAHO– Formally declared this consultation open.

II. Presentation of the Global Technical Strategy

Setting the scene and introductions – David Brandling-Bennett, ex-officio member of the GTS steering committee and co-chair of the GMAP2 Task Force
Dr Brandling-Bennett described the context of the development of the Global Technical Strategy, the purpose and audience for the GTS, and the importance of the Regional Consultations and country input as part of the development process. An overview of the document structure was presented and the alignment between the GTS and the Global Malaria Action Plan 2 was described. The GTS website was presented and it was explained that the document will be posted for public comment through this website before a final version is created.

Progress in malaria since 2000: Global overview and challenges in the Americas – Dr Keith Carter, PAHO
Dr Carter gave an overview of successes in malaria control globally and in the Americas. Key challenges for the next ten years in the region of the Americas include:
1. Shifting emphasis from control to a commitment to, and achievement of, elimination
2. Difficulty in reducing transmission and eliminating *P. vivax* from infected persons
3. Identification and investigation of cases detected in both public and private sectors
4. Retention of technical capacity and expertise in malaria prevention, control and elimination
5. Ensuring universal access to health service, particularly for special population groups and areas difficult to access (e.g. border and conflict areas)

GTS core concepts – Dr Richard Cibulskis, WHO-GMP
Dr Cibulskis reviewed the core concepts of the strategy, including challenges, core values, vision and goals. The long term vision is of a world free of malaria; the vision for the Strategy is to accelerate progress to a world free of malaria. The three specific goals proposed for 2016-2025 are:
- To reduce malaria mortality rates globally by 75% compared to 2015
- To reduce malaria case incidence globally by 75% compared to 2015
- To eliminate malaria from 20 countries that had ongoing transmission of malaria in 2015.

The methods used to arrive at the three main goals for malaria were reviewed: review of regional and country level targets over the next decade, malaria elimination modelling conducted by the Imperial College in London, and an analysis of malaria burden trend by the Global Malaria Programme at WHO. It was emphasized that more information is needed from countries in order to finalize the target for the number of countries that should eliminate malaria by 2025.

Strategic directions
Each of the five strategic directions was presented in plenary, with time for comments after each. The five strategic directions were presented are as follows:
- Surveillance and response: Dr Larry Slutsker, CDC
- Preventing cases and reducing transmission: Dr Keith Carter, PAHO
- T3: Test. Treat. Track.: Dr Trent Ruebush, PAHO/WHO Consultant
- Innovation and implementation research: Dr Socrates Herrera, CLAIM
- Development and health systems strengthening: Dr Rene Salgado, USAID
Pathway to elimination and Briefing for breakout groups – Dr Rainier Escalada

The Pathway to elimination was presented as well as the format for the seven breakout groups to discuss the five strategic directions. Each group was instructed to comment on the core concepts – need for the GTS, challenges, vision, goals, pathway to elimination – as well as their particular strategic direction. In addition to the group discussing innovation and implementation research, each of the other six groups discussed innovation and implementation research related to their strategic direction. The groups were as follows:

1. Surveillance and response – 1 group (simultaneous translation into Spanish, English and French)
2. Preventing cases and reducing transmission – 2 groups (one English, one Spanish)
3. T3: Test. Treat. Track. – 2 groups (one English, one Spanish)
4. Innovation and implementation research – 1 group (Spanish)
5. Development and health systems strengthening – 1 group (Spanish)

Note: Prior to the GTS consultation meeting, the PAHO Regional Malaria team devoted half day of the preceding PAHO business meeting in providing orientation to country delegates on relevant / key GTS concepts. The sessions conducted (and corresponding presenters) in preparation for the GTS consultations are as follows:

- Malaria in the Americas: Strategies and Progress of Efforts – Dr Keith Carter, PAHO
- Malaria Resources and Gaps in PAHO/AMRO: Opportunities and Challenges – Dr Monique Perret-Gentil, PAHO
- Overview of the GTS: Linkages and Relevance to the PAHO/AMRO Context – Dr Rainier P. Escalada, PAHO
- Perspectives on Reorientation of Programmes towards Malaria Elimination – Dr Prabhjot Singh, PAHO

III. Summary of the feedback from the break-out groups

Core concepts

Need for the Strategy

1. To provide technical guidance
2. As a tool for advocacy
3. To give countries a target and for governments to put it on their political agendas – doing so will put pressure on them to bring malaria to the forefront
4. Countries will use this document to adopt best practices and to identify gaps to be filled and areas where capacity building is needed
5. For CARICOM (Caribbean Community) countries to use this as a guide to regional initiative for elimination, certification of malaria free status, and surveillance for prevention of reintroduction
6. For guidance at a strategic level (but not for tactical or operational purposes, which are contained in existing guidance on implementation)
7. To guide the malaria programmes on the road towards the elimination of malaria
8. For global harmonization in the post-MDG agenda

Challenges

1. *P. vivax* is a challenge – the *P. vivax* strategy being developed should be incorporated into the GTS
2. Decentralization – rapid response should be decentralized to the state/district level. Many countries in the Region are committed to decentralization and integration of malaria programmes to the general health systems.
3. Recommend proposing solutions for the way forward, rather than simple highlighting all of the challenges (e.g. cite lessons learned in South America) both in the GTS and GMAP 2 (i.e. if “technical solution” is warranted, then it has to be in the GTS; if solution to issue is beyond the scope of GTS, perhaps it should be covered in GMAP 2?)
4. Although technical people are committed to elimination, in many countries the political will may not be there, and funding may be diverted away from the sparsely populated areas where malaria remains a risk.

5. To promote integration between countries and areas, especially regarding moving populations, through regional initiatives.

6. The challenges are clearly outlined for the African region, but the document must also consider challenges posed for the Americas and other regions where elimination is more likely.

7. The elimination map is not the same as the geographic map – there are challenges associated with having areas within a country that have eliminated malaria and with having areas on borders where malaria persists.

**Core values**

1. Core values – keep the ones on leadership and equity; revise/clarify the middle three, which are currently poorly defined.

2. Country and community leadership – the concept of country leadership should be clarified and the definition should be broad enough to cover various country contexts across Regions (leadership may occur at different levels in different countries/regions); in the Americas, the state cannot cede its leadership role in the fight against malaria; ministries of health have the governing role.

3. Country and community leadership: emphasize the role of volunteers (or other health promoters, according to countries’ local practices), and the importance of support and participation of communities, in ensuring transparency and social responsibility.

4. Gathering and using data for programmatic decisions – in this region, emphasize decision-making based on evidence, and the need therefore to develop such evidence through research on public health needs priorities; at the operational level this core value requires improving data management and access to data; surveillance should include not just data on morbidity and mortality, but also social, economic and other factors.

5. Acceleration – the concept of acceleration is not so relevant to the region – this region is already accelerating; countries should make certain to complete what is now called the control phase, prior to transitioning to elimination; it would be more appropriate to insist on adapting existing programmes to the epidemiological context in each region and country – guidelines for planning actions according to the local context could be developed.

6. Success – success must be measured through achievement of desired impact, measured through impact indicators.

7. Equity – it is a universal value; it does not need to be elaborated upon, but the concept of equality should be distinguished from equity and defined in terms of public health, for example, to whom are prevention and control activities being directed?

**Vision and goals**

1. The long term vision is good.

2. Common regional goals should be emphasized in the GTS, e.g. eliminate malaria in Central America by 2020, and in South America by 2025 (as may be considered technically, politically, and financially feasible).

3. The number of countries eliminating malaria by 2025 could be increased – there are 10 in Central America alone (but, it is better to exceed goals that are set rather than not reach them); the global goal of elimination in 20 countries may not be ambitious enough.

4. Be clear about the definition of elimination (particularly with respect to *P. vivax*).

5. The objective regarding reduction of cases (75%) is ambitious.

6. Add a goal on achieving prevention of reintroduction in countries with no transmission (particularly those countries which have not yet been certified as free of malaria).

7. The goals are relevant but may need to be adjusted for regions which are highly endemic and where malaria exists in challenging settings such as border areas, indigenous groups, mobile groups and mining areas.
8. The vision and goals should be broad strategic lines and each country should develop its goals.
9. The models were developed using *P. falciparum* and not *P. vivax*. A different model is necessary for the Americas.

**Pathway to elimination**
1. Agree with the revision of the graphic representation and the new terminology.
2. The term “reduce” is acceptable because the term “control” is vague and doesn’t shift away from doing things “the same old way”.
3. Suggest “Accelerate, reorient to eliminate”.
4. Need more clear and objective guidance according to each stage of elimination.
5. The pathway should not be simplified (opinion in contrast to comment 1 in this section).

**Surveillance and response**
1. Emphasize stratification: as the malaria burden decreases, stratification must be done at the community/household/individual level. There cannot be an overall recommendation on the details of stratification (criteria for stratification, for example); it should be a tailored approach and the details should be decided upon by the country. No one size fits all strategies.
2. In low transmission settings, response to cases identified through surveillance must be rapid, less than 48 hours. Propose real-time notification of cases using cell phone technology.
3. What type of surveillance is needed when there are no cases? There is no clearly defined strategy, but one needs to be defined quickly as more and more countries are in the prevention of reintroduction/elimination stages.
4. The components of post-elimination surveillance/outbreak detection should be defined clearly.
5. Human resources – there is an acute need for surveillance officers, especially when the number of cases goes down. This is counter-intuitive and need to be emphasized.
6. Data from the public and private sectors need to be linked.
7. There is a need to revisit the old guidelines on annual blood examination rates. Are these guidelines useful? Are they appropriate in an elimination setting?
8. Certain key concepts need to be highlighted for low transmission settings: case confirmation, active case detection, case notification, and the need for molecular diagnostics for identifying sub-microscopic infections.
9. It should be emphasized that the receptivity of areas where imported cases have been identified will be an important element to consider in pre-elimination settings.
10. Surveillance should not be detached from M&E of all interventions and activities.
11. The API is not a useful index in our setting.
12. Integration and decentralization – document should make it clear that as countries near elimination it may be hard to integrate surveillance and we may want it separate for rapid response. And regarding decentralization, there need to be dedicated malaria staff that will not be pulled for other activities if you are serious about elimination.
13. Improved communication on the cost of reporting; too often the cost of reporting is underestimated, and there is the misconception that as disease burden goes down surveillance costs will also go down.
14. Need to include regional and cross-country collaboration with specific attention to border areas in the design of surveillance systems.
15. Need a strategy for maintaining health care worker vigilance when cases reach very low numbers.

**Prevention of cases and reduction of transmission**
1. Evidence to guide actions needs to be applicable to the region (currently focused on Africa).
2. Should also consider activities aimed at areas or “regions” inside a region – for example, Amazonian Region and Pacific Coast in the Americas Region.
3. The vector control section is a reasonable length.
4. Countries must build/reorient their programmes and interventions base on vector surveillance (evidence-based vector surveillance); an entomologic surveillance programme must exist (to monitor susceptibility to insecticides, vector species and habits, etc.)

5. Countries must ensure entomologic data is gathered prior to investment in mass distribution of bed nets; due to lack of local data on vector biting habits, vector interventions currently are not always evidence based

6. The use and importance of LLINs is understood, however, many countries lack monitoring and evaluation programmes, especially in the Americas

7. Capacity building must be addressed in the first few years to ensure sustainability and to meet targets in the coming years and beyond

8. The GTS should recommend the development of specific guidelines and SOPs for distribution, monitoring and evaluation of bed nets prior to the adoption of a bed net distribution programme in a country. Note: there are generic guidelines available, but some countries lack the capacity to develop these guidelines in a simple manner and with the appropriate monitoring forms

9. The GTS should incorporate some aspect of community based vector control, COMBI (Communication for Behavioural Impact), health education and social communication, etc.

10. Regional experiences with certain aspects of vector control can be examples of successful practices that have an important role to play in vector control elsewhere (e.g. DDT/GEF project in Central America)

11. Complementary vector interventions and their effectiveness are not included; with the change in biting habits of various vectors, inclusion of space spraying – ULV & thermal fogging – as an option needs to be reviewed; the short term effects of such an approach is understood but its role should be further explored

12. In this region, insecticide-based interventions have a different role than they may have in other regions, and this should be addressed

13. The decision to implement vector control interventions should be based on an analysis of the foci of transmission (including epidemiological stratification, habits of people, vector abundance and behaviour, susceptibility to insecticides), evaluation of the potential contribution of the intervention, and cost-effectiveness considerations.

14. Regional variations should be highlighted. It is more important to control the vectors that transmit P. vivax than those that transmit P. falciparum (in the Americas), and diagnosis and treatment must be established before thinking of implementing LLINs or IRS (in this region)

15. The call to scale up IRS is not so relevant for the region; need to better know vectors to direct and define actions

16. It is difficult to determine the relevance of vector control interventions in low transmission settings, or where transmission has been interrupted. There are no clear guidelines for this.

17. The statement that coverage with LLINs should be universal is not applicable to this region

18. The vector control approach must be comprehensive, integrated and multisectoral, and must include the community level

19. Coordination of vector activities should be led by the local government

20. There should be a regional plan for surveillance of resistance to insecticides, with an assurance of the availability of necessary materials (particularly those for the WHO test)

21. National policies for rational use of insecticides should be promoted

22. Treatment of breeding sites should not be ignored – in some places, larviciding and environmental management may be of greater importance than vector control through LLIN and IRS

23. The need to adapt approaches to the local context could be stressed more in the document

24. There should be a core set of trained vector control personnel who also cover other vector-borne diseases; the composition of the team should be guided by the technical needs; there should be a model of staffing that ensures that highly skilled staff do not need to be present in all locations

25. Paragraph 99 – in most cases it is not operationally feasible to implement chemoprophylaxis for travellers within a country. Each country should consider its own situation and the characteristics of the groups at risk before making a general recommendation of prophylaxis
among all travellers [between malarious and non-malarious areas within a country]. Due to the different policies that different countries have on prophylaxis, these should be linked through a guide on prophylaxis among travellers in the region of the Americas.

26. What chemoprevention will be useful in the Americas? Clear guidelines are needed as to whom should receive prophylaxis, when, and for travel to which areas in the Americas.

27. IPT and IPTi are not relevant for the Americas

28. Strengthen local capacity to analyse indicators and variables in order to be able to define and direct interventions

29. There needs to be greater emphasis on integrating malaria surveillance into other vector control programmes such as dengue/ this is particularly important for low endemic countries which cannot afford to fund an independent programme.

**T3: Test. Treat. Track.**

1. The document should emphasize that diagnosis by microscopy should be the gold standard; RDTs should be used in defined situations and are not meant to replace microscopy. RDTs should be prioritized in remote areas and places of high and medium transmission. Microscopy capacity should be maintained and should meet WHO quality criteria

2. The GTS document is very general and specific messages for distinct levels of transmission/endemicity and different plasmodium species should be included. Certain diagnostic methods can be more appropriate or effective depending on transmission intensity, demographics and sociological factors – an algorithm to guide choice of diagnostic methods would be useful

3. Quality control (QC) must be performed systematically to help choose the most appropriate diagnostic method for each situation (e.g. changing from blood films to RDTs)

4. The document should emphasize the need to maintain microscopic diagnosis capabilities in areas of low transmission and areas where transmission has been interrupted

5. When recommending RDTs, the document should consider the evidence published in the region on the expression of HRP2 and HRP3 and detection of *P. falciparum*

6. Supervised treatment should be recommended in some situations with few cases (e.g. pre-elimination setting)

7. To provide diagnostic confirmation and adequate treatment is challenging in some areas and populations (e.g. indigenous/remote populations; illegal mining areas); focal international initiatives should be stimulated (networks to exchange experiences and policies)

8. Reinforce that adequate treatment (including drug quality, species-specific regimens, weight-adjusted dosing, ensuring compliance) must be a goal of programmes

9. *P. vivax* resistance to chloroquine – guidance is needed on the level of parasite resistance at which programmes should change to an ACT

10. The document must take into account evidence and experiences with the use of primaquine in populations with low prevalence of G6PD deficiency; the regional prevalence of G6PD deficiency must also be considered in discussions of the usefulness of tafenoquine

11. There are problems with primaquine metabolism in the region – this needs to be investigated.

12. A test is needed to evaluate both this metabolism deficiency and G6PD deficiency

13. State in the document that there is already evidence of declining efficacy of chloroquine in the Amazon region

14. Monitoring of antimalarial efficacy (in vitro tests and molecular markers, for both artemisinin and the partner drug) needs to be established and performed systematically by national programmes in sentinel units as an essential part of the surveillance system; this activity should move from academic to programmatic research

15. Paragraph 129 – due to the decreased incidence of malaria, it is difficult to meet the recommendations for monitoring in vivo resistance to antimalarials; consider alternatives, such as multicentre studies and other methods

16. A febrile syndrome surveillance approach is important in order to diagnose cases in low transmission settings and to offer proper case management (simply giving a patient a negative malaria test result is not sufficient – treatment must be given)
17. The wording of paragraph 114 is not clear in either Spanish or English “In areas where malaria transmission is decreasing, programmes may decide to progressively limit use of malaria tests without missing any cases of malaria ...”

18. Paragraph 127 – It does not seem accurate to say that there is evidence of ways to contain artemisinin resistance, or that efforts to contain artemisinin resistance have been successful

19. Integration with other disease programmes (e.g. dengue) is appropriate for certain aspects of T3

20. Regarding guidance for different epidemiological settings, there are documents that this region has, strategic orientation documents, which talk about the existing tools and how to combine them in high or medium or low transmission. These are on the PAHO webpage and have been prepared for different settings and could be applicable for the GTS

21. To improve case management along borders, countries should harmonize treatment guidelines and recommendations

22. Molecular testing and development in the coming years: PCR and LAMP can accelerate elimination. Generate that expectation and that openness to more sensitive tests. Consider adding as innovation in Diagnosis and describe its use in the future

23. Emphasize that for very low endemic countries, diagnostic capacity and competency must be maintained and fever case surveillance must be maintained as well

**Innovation and implementation research**

1. Methods/strategies for determining interruption of transmission
2. Focus on increased surveillance at the borders (e.g. airport screening), with companies hiring migrant/overseas workers
3. Work to empower communities and make them more responsible/accountable
4. Consider mandatory reporting (e.g. in Mexico, El Salvador)
5. Recommend integrating disease surveillance (e.g. with TB, or dengue) for efficiencies (except at the pre-elimination/elimination stages)
6. More research must be supported on the effects of global warming on malaria
7. More research and development is needed for vector control tools to address outdoor biting vectors
8. Promote the development of new insecticides for use in public health
9. Evaluate novel strategies according to each location, specific epidemiology, and socio-demographic situation
10. Investigate alternatives to RDT for the diagnosis of *P. vivax*
11. All innovations must be evaluated in the context in which they will be applied
12. Include research on how to implement new technologies in health systems
13. Vaccine research is not oriented to the context of the Americas and vaccines are only evaluated in Africa
14. Improve methods of symptomatic and asymptomatic diagnosis (with an emphasis on *P. vivax*)
15. Develop diagnostic kits for febrile syndromes
16. Conduct metabolism studies examining dosing of primaquine and tafenoquine
17. Need for evidence regarding the use of vector control interventions in the Americas
18. Need information on the extent to which IRS and bednets are effective in the Americas
19. Research in the social sciences (indigenous, migrant, border and miner populations, etc.) is required
20. Surveillance systems for mobile populations (and borders)
21. Means of strengthening health systems

**Development and health systems strengthening**

1. This component is less developed than the others
2. Define actions to strengthen the components of the health system
3. The malaria programme needs integration and support within the health system
4. Revitalization of health workers and the community at the operational level
5. The state should provide the basic framework for integration of programmes into the health systems.
6. Urge governments to comply with laws and to formalize the participation of communities
7. Political commitment is needed from leaders of all countries
8. Understand that the malaria programme is part of the broader health programming of countries – strengthening health services is not only about the malaria programme. Invite other programmes to ensure that our actions are effective and comprehensive
9. Strengthening cross-border zones in areas of higher transmission – address key elements, such as cross-border legal issues
10. Standardize handling and registering of patients and health services to ensure standardized approaches to monitoring and treatment; standardize health services and networks or health services in endemic areas
11. Revise and implement international health regulations; create networks of supportive care and bilateral agreements to ensure constant access to care (particularly for border areas); track and care for people without regard to nationality
12. Multicentre drug resistance monitoring can be integrated into existing services if there is a single treatment scheme used across an area
13. Define the role of the local level in decision-making and the appropriate feedback mechanism to higher levels with respect to decision-making
14. The region has a unique orientation guide that could be used globally if tailored to local situations
15. Existing regional coordination mechanisms could be applied to the health services sector
16. With respect to the challenges of the private sector, encourage corporate social responsibility among the various private companies
17. Citizen participation in health systems is critical
18. Malaria control programmes can benefit from strengthened systems, but more emphasis is needed on how health systems can benefit from malaria programmes. Reducing malaria can reduce inequities and resolving inequities can resolve malaria

**Call to Action**

1. Need to define what universal coverage means
2. Does not mention community as a key factor in success
3. Emphasize the need for adequate funding for sustainability of operations
4. Adequate international advocacy for a closer monitoring of the actions that we consider for the elimination of malaria
5. The call to action may be more appropriate for the GMAP than for the GTS
6. Emphasize evidence-based efforts and the need to continue to increase this type of work

**Other general feedback**

1. Find a way to reflect regional differences in the document
2. The document should include more recommendations for countries which are on the brink of elimination, and those with no transmission which need to focus on preventing re-introduction
3. There should be more mention of malaria in border areas and greater emphasis on strategies to target this issue (which is particularly important to the Americas)
4. For regions outside Africa, vivax must be included as a central component, not as a side paragraph or afterthought. Vivax is a challenge that we have that specifically affects the Americas; it is essential to emphasize more vivax in this plan.
5. There should be a process to expedite certification regions or areas of larger countries as malaria free; the process of certifying elimination only when an entire country has eliminated malaria delays the process
6. A comprehensive strategy should include the spectrum of malaria transmission situations that occur in different regions (not limited to those prevalent in Africa)
7. The document should not encourage countries to make the transition to the elimination phase when they are unprepared for it; emphasize the need for countries to be move to elimination only when they are properly prepared for it.

8. A paragraph at the beginning of the document should mention the variability of the epidemiology of malaria in regions of the world, and even within each region.

9. A document such as a global strategy cannot give all the details of each recommendation and therefore should include references and links to the guidance documents published by WHO.

10. Investigate different management models.

11. Information systems are deficient / need further strengthening.

12. Strengthen the development of research by Ministries by establishing strategic alliances with research institutions in the region (alliances between government and academia).

13. Review the indicators that are used to measure control in countries and sub-regions.

14. Emphasize the importance of a multi- and inter-disciplinary approach. Malaria is not just a problem of the health sector, must include mining, agriculture, environment and the private sector.

15. The first chapter should be on health services, and/or the introductory sections should acknowledge the varying contexts (especially in terms of health services) in which this Strategy must operate.

16. Encourage advocacy: to strengthen the multisectoral approach (education/tourism/defence).

17. Develop strategies for keeping malaria high on the agenda of leaders when other diseases (e.g. dengue) receive more attention.

Other Key Observations/Comments from Representatives of Organizing Institutions:

WHO-GMP (Dr John Reeder, Acting Interim Director)
- Significant changes to the GTS would need to be made to ensure its relevance and applicability to the Americas (and other Regions outside Africa), where elimination is specifically pursued.
- The GTS consultation process is an opportunity for dialogue and harnessing the rich experiences and perspectives among various stakeholders.

GTS Steering Committee (represented by Dr David Brandling-Bennett, Bill and Melinda Gates Foundation)
- Because no single strategy can meet the needs of all regions and countries, GTS must support the development of regional, sub-regional, and country strategies.
- The morbidity and mortality goals are not relevant for most countries in the Americas, which may have up to 12 countries achieve elimination by 2025. Regional goals are needed, including a goal or goals for malaria free countries.
- A process of recognizing and even certifying malaria free areas within (large) countries (e.g., Brazil) would be desirable.
- It is not clear what acceleration means in countries that are actively eliminating or have eliminated malaria.
- Stratification is an essential component and needs strengthening.
- More attention needs to be given to low transmission settings in the GTS.
- Roles for the private sector need to be better defined.
- When incidence is low, surveillance needs to be integrated but response will have to be intensified for elimination.
- Integrated community case management and other means of community engagement are needed as malaria incidence decreases.
- There is a significant need for better understanding of vectors and vector behaviour in the region and for measuring the impact of LLINs. Vector control should be considered in the context of human behaviour.
- RDTs should be more widely used in the region, without displacing the microscopy capacity built in the past decade. RDT choice needs to take account of HRP2 deficiency in some areas, and better P. vivax diagnostics are needed.
• Better means of detecting asymptomatic infection are needed
• Ongoing research, including operational and implementation research, should be emphasized

PAHO (Regional Malaria Team)
• WHO-GMP and RBM should consider strong linkage in the consultation process for GTS, Pv, and GMAP 2 in the other Regions (i.e. strong linkage across the agenda of the 3 meetings; ensuring cross-overs among participants / not having separate sets of participants; facilitating mechanisms to ensure that feedback from participants are noted appropriately, regardless of perception on whether they are better integrated in the GTS, Pv or GMAP 2 documents)
• WHO-GMP should not limit itself in reviewing or focusing on “consensus points” as this would inhibit appropriate understanding of the rich diversity in perspectives (which is primarily linked to variations in contexts); actual work that needs to be done in various elimination foci would very likely be context specific (i.e. no one size fits all solutions; a dynamic problem-solving exercise)
• If the GTS indeed holds serious focus on “accelerating towards elimination”, it needs to be able to optimally transcend the limits of its “global perspective” (i.e. its reader / target audience – including an implementer of elimination interventions in a foci / community, should be able to find clear guidance from it; if this is not possible, perhaps this should be pointed out as a limitation or beyond the scope of the GTS)
• For its part, the PAHO/AMRO Regional Malaria team, as it has done in previous years and periods, will facilitate the consolidation of the Region’s post-2015 Malaria Strategic Plan, ensuring optimal alignment with the GTS while remaining directly and strongly relevant to the various contexts of its countries, communities and peoples.

ANNEXES
Documentation team for the report of the AMRO Regional Consultation Meeting on the GTS
List of participants
Meeting agenda
Photo of participants

Documentation team for the regional report of the AMRO Regional Consultation Meeting on the GTS

Chair: Dr Paola Marchesini
Rapporteurs: Dr Rachel Bronzan
            Dr Keith Carter
            Dr Rainier Escalada
            Dr Monique Perret-Gentil
Regional Consultations: Strategies and Action Plans for Malaria
Consulta Regional: Estrategias y Planes de Acción contra la Malaria
Hotel Intercontinental Miramar Panama
Panama City, Panama / Ciudad de Panamá, Panamá
31 March - 4 April 2014 / 31 de marzo al 4 de abril del 2014

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**WHO Global Malaria Programme**
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Dr Richard Cibulskis
Dr Zsófia Szilagyi
Dr Rachel Bronzan

**UN Foundation**
Ms Elizabeth Ivanovich

**Independent Experts**
Dr Trenton Ruebush
Objectives:

- Facilitate sharing of country experiences, challenges, and perspectives from malaria partners to ensure that the Global Technical Strategy for Malaria: 2016-2025 (GTS) is relevant to the malaria programmes in the Region;
- Consolidate recommendations and provide inputs on the GTS

April 1 (Tuesday) – Global Technical Strategy Expert Consultation

09:00 – 9:30 Welcome Messages. Dr. Federico Hernández-Pimentel
PAHO Representative in Panama

Dr. Carlos Galvés
Director General for Health
Ministry of Health of Panama

Dr. Luis G. Castellanos
Unit Chief, Neglected, Tropical and Vector Borne Diseases, PAHO

Opening Remarks – Dr. John Reeder
Director, WHO Global Malaria Program

9:30 – 10:00 Setting the Scene and Introductions – Dr. David Brandling-Bennett, GTS Purpose and Audience for the GTS
- GTS Development Process and Country Input
- Overview of document structure

10:00 – 10:30 Progress in Malaria since 2000 – Dr. Keith Carter, PAHO
- Global Overview and in the Americas Region

10:30 – 11:00 Coffee break

11:00 – 12:00 GTS Core Concepts – Dr. Richard Cibulskis, WHO-GMP
- Challenges
- Core Values
- Vision and Goals
- Pathway to Elimination

12:00 – 12:30 Strategic Direction 1: Surveillance and Response
- Dr. Larry Slutsker, CDC

12:30 – 13:30 Lunch

13:30 – 14:00 Strategic Direction 2: Preventing cases and reducing transmission
- Dr. Keith Carter, PAHO
14:00 – 14:30  Strategic Direction 3: T3: Test. Treat. Track – Dr. Trent Ruebush
14:30 – 15:00  Strategic Direction 4: Innovation and implementation research
               – Dr. Socrates Herrera, CLAIM
15:00 – 15:30  Strategic Direction 5: Development and health systems strengthening
               – Dr. Rene Salgado, USAID
15:30 – 16:00  Strategic Directions: Guide for Break-out Groups – Dr. Rainier Escalada,
               PAHO
16:00 – 16:30  Coffee Break
16:30 – 18:00  Break-out groups: Break-out groups each review Strategic Directions –
               (Facilitators, to be chosen from among confirmed participants)
               1. Surveillance and Response
               2. Preventing cases and reducing transmission (2 Groups)
               3. Medicines to prevent malaria and reduce transmission; T3: Test. Treat. Track
                  (2 Groups)
               4. Innovation and implementation research
               5. Development and health systems strengthening

<table>
<thead>
<tr>
<th>April 2 (Wednesday) – Global Technical Strategy Expert Consultation</th>
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<tbody>
<tr>
<td>09:00 – 09:30 Recap of Day 1 and Direction for continued group work</td>
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<tr>
<td>Dr. Monique Perret-Gentil, PAHO</td>
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<tr>
<td>09:30 – 10:30 Break-out groups: Wrap up Strategic Directions Summary</td>
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<tr>
<td>10:30 – 11:00 Coffee break</td>
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<tr>
<td>11:00 – 12:30 Break-out groups: Cross-cutting themes</td>
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<td>12:30 – 13:30 Lunch</td>
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<td>13:30 – 15:00 Plenary: 5 Groups Report Back</td>
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<td>Dr. Zsofia Szilagyi, WHO-GMP</td>
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<td>15:00 – 15:30 Coffee Break</td>
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<tr>
<td>15:30 – 17:00 Plenary: Discussions and Recommendations</td>
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<tr>
<td>Dr. Keith Carter / Dr. Rainier Escalada, PAHO</td>
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Participants at the AMRO Regional Consultation on the Global Technical Strategy for Malaria: 2016-2025
Panama City, Panama, 1-2 April 2014