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STRATEGY AND PLAN OF ACTION FOR MALARIA

Introduction

1. In 2005, the 46th Directing Council of the Pan American Health Organization (PAHO) approved Resolution CD46.R13 on malaria prevention and control. This resolution embraced the Internationally Agreed-upon Development Goals, including those Contained in the Millennium Declaration. The resolution requested the Director to continue providing technical cooperation and coordinating efforts to reduce malaria in endemic countries and prevent reintroduction of transmission where it has been interrupted (*1*). Accordingly, PAHO proceeded to engage representatives of various sectors and stakeholders working in the field of malaria in a comprehensive consultative process to develop useful guidelines for Member States and partner institutions for the prevention and control of malaria in the Region. The result of this process was the Regional Strategic Plan for Malaria in the Americas 2006-2010 (*2*). The Plan outlines the key components of malaria prevention and control in the Region and provides guidance and strategic orientation for the work of the stakeholders involved.

2. This document presents an overview of progress in the Region towards achieving the 2010 objectives of the Roll Back Malaria (RBM) Partnership and the 2015 United Nations Millennium Development Goals (MDGs) on malaria. It also addresses reinforced targets and commitments; updated strategic lines that address evolving challenges in the context of decreased malaria transmission and growing interest in malaria elimination; and a framework for stronger integration of some of the main cross-cutting issues, including gender, ethnicity, human rights, health promotion, primary health care, and social protection in health.

Background

3. The Region's efforts and the work done by PAHO on malaria are guided by the commitment to meet existing global, regional, and country targets—namely: the RBM target to reduce the malaria burden in half by 2010 (*3*); the United Nations Millennium Development Goals (MDGs) for 2015, in particular MDG 6, to halt and begin to reverse the incidence of malaria by 2015; and World Health Assembly Resolution WHA58.2 (2005), which calls for reducing the malaria burden at least 50% by 2010 and 75% by 2015. This represents an additional 25% reduction beyond the RBM target for 2010 (*4*).

4. In addition, recent important mandates from the PAHO Directing Council have provided additional guidance for work on malaria in the Region. These include the following documents: (a) Elimination of Neglected Diseases and Other Poverty-related Infections, (CD49/9 [2009]), which cites malaria among the diseases that may be eliminated in some areas (*5*), and (b) Integrated Vector Management: A Comprehensive Response to Vector-borne Diseases (CD48/13 [2008]), which promotes integrated vector management as an integral part of vector-borne disease management in the Region (*6*).

5. Concerted efforts mounted by the countries and collaborating institutions within the framework outlined in the Regional Strategic Plan for Malaria in the Americas 2006-2010 contributed to a 52% reduction in malaria morbidity in the Region between 2000 and 2009; a 69% reduction in disease-related deaths; and the achievement of targets for reduction of the malaria burden in 18 of the 21 malaria-endemic countries in the Region.

6. While the continuing decline in malaria cases and deaths affirms the Region's success in combating the disease, this progress also ushers in a unique set of important and evolving challenges for the Region. Such challenges include sustaining the commitment of stakeholders, protecting current achievements, and moving toward elimination in areas where this is deemed feasible.

7. A Strategy and Plan of Action for Malaria in the Americas 2011–2015, with an updated framework and revised strategic lines, has been prepared through a consultative process that has enlisted input from national and international partners. A number of working groups within the WHO/PAHO system, including the Global Malaria Program and entities concerned with dengue and other vector-borne diseases, gender, ethnicity, human rights, health promotion, primary health care, and social protection in health have also been involved.

Situation Analysis

8. The Region reported a total of 564,451 confirmed cases of malaria in 2009, or a reduction of 52% compared with 2000; and 118 deaths in that same year, or a decrease of 69% relative to the 2000 baseline. Of the total, 74% were caused by *Plasmodium vivax*, 26% by *P. falciparum*, and <0.1% by *P. malariae* (reported in Brazil, French Guiana, Guyana, Suriname, and Venezuela) (*7*).

9. Eighteen of the 21 malaria-endemic countries in the Region saw a decrease in cases in 2009 relative to the year 2000. Nine of these countries reported reductions of more than 75%, thereby meeting both the RBM and UN Millennium Development Goals (MDGs). Four countries, with decreases of 50% to 75%, have already met the RBM target, while five others, with reductions of up to 50%, are making progress. Unfortunately, three countries continue to report increases in their total number of cases (see Annex A).

10. The 27 Member States declared free of malaria transmission by WHO in previous years have reported a total annual average of 1,800 cases since 2000, mostly occurring among travelers from endemic countries in the Americas and other regions. Outbreaks were reported in two non-endemic countries in recent years—namely, the Bahamas and Jamaica. These outbreaks were controlled thanks to prompt action by national authorities and effective collaboration with PAHO and other international agencies. Intensive surveillance is in effect in these two countries to prevent future outbreaks, and other non-endemic countries are strongly encouraged to learn from this experience.

11. To meet the RBM and MDG reductions envisaged, WHO urges engagement in three main strategies:

- Prevention using long-lasting insecticidal nets (LLINs);
- Prevention using indoor residual spraying (IRS); and
- Rapid treatment with effective antimalarial medicines (*8*).

12. Implementation of these globally recommended strategies in the Region's malaria-endemic countries has varied, reflecting specific realities and situations (see Annex B for details).

13. The annual search for the Malaria Champions of the Americas—jointly presented by PAHO, the Pan American Health and Education Foundation (PAHEF), and the George Washington University Center for Global Health (GWU-CGH)—provided the opportunity to identify and celebrate best practices in the countries. In 2010, top recognition went to the Suriname National Malaria Board for outstanding achievement in reducing the country's malaria burden through strengthened partnerships, community

mobilization, and a comprehensive program of surveillance, prevention, diagnosis, and treatment that reaches out to border areas and mobile populations. In 2009, the honor went to Ecuador for an innovative partnership between the Ministry of Health's National Service for the Control of Arthropod-borne Diseases (SNEM) and the Andean Health Organization's Project for Malaria Control in Andean Border Areas (PAMAFRO). This joint initiative reached out to vulnerable populations with actions that included training community leaders and health workers, disseminating educational information, and, in general, strengthening the country's capacity to overcome the challenges posed by malaria. Other Malaria Champion awards have gone to Brazil, Colombia, and México (*9*). Commemoration of Malaria Day in the Americas (*10*), observed annually on 6 November and supported by Resolution CSP27.R11 (2007) of the 27th Pan American Sanitary Conference (*11*), provides an opportunity to showcase the inspiring work of the Malaria Champions of the Americas, as well as platform for countries of the Region to engage in a year-round aggressive campaign to combat the disease.

14. Effective use of best practices has been demonstrated by the Amazon Network for the Surveillance of Antimalarial Drug Resistance/Amazon Malaria Initiative (RAVREDA/AMI), which engages in a diverse array of action lines and interventions. Its collaborative work has made a major contribution toward meeting malaria reduction targets in its partner countries: Bolivia, Brazil, Colombia, Ecuador, Guyana, Perú, and Suriname. In addition to the Ministries of Health and local stakeholders in participating countries, the Network's partners include the United States Agency for International Development (USAID), the U.S. Centers for Disease Control and Prevention (CDC), the Management Sciences for Health/Rational Pharmaceutical Management Plus Program (MSH/RPM Plus), the U.S. Pharmacopeia Drug Quality and Information Program (USP/DQI) program, the Research Triangle Institute (RTI), Links Media, and PAHO, which serves as the AMI secretariat and technical support lead for RAVREDA. Network areas of action include surveillance of resistance to antimalarial medicines, access to quality diagnosis, access to and use of antimalarials, drug quality, stratification and analysis of information, systematic entomology, surveillance of insecticide resistance, and use of impregnated bed nets. RAVREDA/AMI is also recognized for its contribution to laying the foundation for successful country proposals to the Global Fund. In 2008, AMI began to extend its activities to countries in Central America (*12*).

15. The Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America (DDT-GEF) 2003-2008, funded by the United Nations Environment Program (UNEP) and coordinated by the PAHO Sustainable Development and Environmental Health Unit, broke ground by enlisting comprehensive interventions and was particularly effective in engaging communities to fight the disease. Coordination channels established through DDT-GEF are currently contributing to the Mesoamerican Health Initiative, which includes malaria elimination in some of its target areas (*13*).

16. Domestic funding for the countries' malaria efforts increased and amounted to approximately US$ 179 million for the Region in 2009. This remains the primary source of malaria funding in the Americas. The Global Fund's total lifetime investments/commitments for malaria projects in the Region amount to approximately $334 million. Countries with successful proposals for malaria projects have included: Bolivia, Brazil, Colombia, Dominican Republic, Ecuador, Guatemala, Guyana, Haiti, Honduras, and Nicaragua.

17. The reduced number of cases in most of the malaria-endemic countries has also ushered in a unique set of important and evolving challenges for the Region, including:

(a) Need to review and update malaria policies and strategic frameworks to reflect work carried out in the Region, including complex emergencies; prevention and control; pre-elimination; elimination; and prevention of re-introduction.

(b) Need for sustained and strengthened surveillance at all levels of the health system to detect malaria threats and trigger appropriate responses with minimal delay, and identify resistance to antimalarial medicines.

(c) Need for all partners and stakeholders to redouble efforts to foster the development, accessibility, and use of evidence-based interventions by malaria stakeholders and initiatives.

Proposal

Strategy

18. Lessons learned during implementation of the previous strategic plan reinforce the importance of having clear targets and maintaining a proactive and multi-pronged approach to malaria efforts. In a process initiated at the 9th Biennial Regional Meeting of National Directors of Epidemiology and Malaria Programs in November 2009, consultation with partners and stakeholders through multiple country visits and technical meetings has resulted in the following list of targets to which all are committed for 2015:

(a) Further reduction of malaria morbidity by 75%, as called for by WHA58.2 (2005).

(b) Further reduction of malaria-related deaths by 25%.

(c) Implementation of efforts to eliminate malaria in areas deemed feasible (particularly Mesoamerica and the Southern Cone).

(d) Reversal of the trend in countries that saw an increased number of malaria cases between 2000 and 2010 (particularly the Dominican Republic, Haiti, and Venezuela).

(e) Prevention of the reintroduction of malaria endemicity in countries that have been declared malaria-free.

19. To accomplish these targets, the Strategy and Plan of Action for Malaria has identified the following components:

(a) Malaria Prevention, Surveillance, and Early Detection and Containment of Outbreaks.

(b) Integrated Vector Management.

(c) Malaria Diagnosis and Treatment.

(d) Advocacy, Communication, and Partnerships, and Collaboration.

(e) Health Systems Strengthening; Strategic Planning, Monitoring and Evaluation; Operations Research; and Country-Level Capacity-Building.

20. These program components should be adapted to the program context—for example: complex emergencies, prevention and control, pre-elimination, elimination, and prevention of reintroduction, and the specific circumstances of individual countries, including national policies and mandates; dynamics of international relations, particularly in border areas; commitment to various cross-cutting issues, among others.

Plan of Action

Goals and Objectives

Goal 1: Intensify efforts directed toward malaria prevention, surveillance, early detection, and outbreak containment in various program contexts.

Objectives

1.1 Reinforce country capacity in malaria prevention through efforts that include health education and promotion, use of appropriate prophylactic measures, among others.
1.2 Further improve information systems and advocate that malaria surveillance data be disaggregated by sex, ethnicity, and other variables that facilitate appropriate analysis of disparities and inequalities between populations.
1.3 Strengthen and improve the epidemiological information exchange system at all levels—regional, between countries with common borders, and within the countries themselves.
1.4 Strengthen the surveillance system for malaria morbidity and mortality by focusing on judicious detection and management of malaria outbreaks in conjunction with International Health Regulation (IHR) efforts.

1.5 Standardize and implement appropriate methodologies for the investigation of malaria cases and deaths, coupled with active surveillance, especially in areas of low transmission or where the disease has been eliminated, with a view to preventing reintroduction.

1.6 Further strengthen research capability and the development of technologies and tools that apply to malaria prevention, surveillance, early detection, and outbreak containment.

Indicators

- Number of Member States implementing malaria prevention efforts. (Baseline:[1] 28. Target:[2] 33.)
- Number of countries reporting malaria surveillance data annually to PAHO/WHO, by transmission units identified and by sex and age. (Baseline: 21. Target: 21.)
- Number of malaria-endemic countries with common border areas that share epidemiological information and collaborate on prevention, control, and/or elimination efforts. (Baseline: 21. Target: 21.)
- Number of countries that meet International Health Regulations (IHR) core capacity requirements for outbreak investigation and response. (Baseline: 0. Target: 35.)
- Number of countries that use the standardized PAHO/WHO methodology for case investigation. (Baseline: 21. Target: 25.)
- Number of countries documenting and implementing a research agenda that focuses on malaria prevention, surveillance, early detection, and outbreak containment. (Baseline: 13. Target: 17.)

Goal 2: Promote, strengthen, and optimize mechanisms and tools for judicious and cost-effective vector management.

Objectives

2.1 Provide technical assistance to countries for development of their capacity to address specific vector management problems, including monitoring for insecticide resistance.

2.2 Further develop, strengthen, and expand the coverage of existing networks that monitor insecticide resistance.

2.3 Advocate the recruitment, training, and retention of health system personnel trained in vector management.

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[1] Baselines are set on 2011.
[2] Targets are set for 2015.

2.4 Collaborate on maintaining entomologic surveillance and vector management capacity in countries that have eliminated local malaria transmission.
2.5 Advocate research on integrated vector management and related areas of work.

Indicators

- Number of countries (both malaria-endemic and non-endemic) that are implementing integrated vector management based on PAHO/WHO guidelines. (Baseline: 21. Target: 28.)
- Number of malaria-endemic countries monitoring insecticide resistance. (Baseline: 12. Target: 17.)
- Number of countries that use results of entomologic surveillance in decision-making and impact evaluation. (Baseline: 17. Target: 21.)
- Number of countries undertaking research on integrated vector management. (Baseline: 8. Target: 13.)

Goal 3: Strengthen efforts to achieve universal access to prompt, accurate, and quality malaria diagnosis, followed by rapid treatment with effective antimalarial medicines.

Objectives

3.1 Further develop, strengthen, and expand the coverage of existing networks in malaria diagnosis and surveillance to detect resistance to antimalarial medicines.
3.2 Strengthen and sustain capacity for the surveillance of resistance to antimalarial medicines, as well as quality assurance in malaria treatment and diagnosis, including external quality assurance programs (EQAP).
3.3 Advocate for increased access to coverage (particularly in the public health care system, and in the private system as deemed appropriate) that is equitable, efficient, and effective, with adherence to appropriate malaria diagnosis and treatment regimens, especially for pregnant women, children, persons living with HIV/AIDS, travelers, mobile populations, miners, loggers, banana and sugarcane plantation workers, indigenous groups, populations in areas of armed and/or social conflict, and people living in border areas or areas of common epidemiologic interest.
3.4 Strengthen advocacy for use of the treatment guidelines recommended by PAHO/WHO while discouraging presumptive treatment.
3.5 Enhance institutional, network, and country readiness to perform and manage appropriate and adequate malaria diagnosis and treatment in various program contexts.
3.6 Reinforce capacity for the clinical management of malaria, particularly severe and complicated cases, in the public sector and, as deemed appropriate, in the private sector.

3.7 Further strengthen research capability and the development of technologies and tools that apply to malaria diagnosis and treatment.

Indicators

- Number of countries participating in knowledge-sharing (including technical meetings) on the subjects of malaria diagnosis, treatment, and resistance to antimalarial medicines. (Baseline: 27. Target: 33.)
- Number of countries with established quality control systems for malaria diagnosis (microscopy and Rapid Diagnostic Tests as applicable) and for antimalarial medicines. (Baseline: 10. Target: 21.)
- Number of malaria-endemic countries reporting malaria drug resistance surveillance data to PAHO, as per PAHO/WHO guidelines. (Baseline: 17. Target: 20.)
- Number of countries participating in an external quality assurance program (EQAP). (Baseline: 10. Target: 21.)
- Number of countries where PAHO/WHO-recommended diagnostic tests and treatment regimens are available. (Baseline: 23. Target: 28.)
- Number of countries with a policy for non use of presumptive treatment of malaria. (Baseline: 17. Target: 21.)
- Number of countries implementing PAHO/WHO guidelines for malaria diagnosis and treatment. (Baseline: 23. Target: 28.)
- Number of countries documenting and implementing a research agenda that focuses on malaria diagnosis and treatment. (Baseline: 13. Target: 21.)

Goal 4: Foster an environment that promotes sustainability and supports collaborative efforts and best practices to combat the disease.

Objectives

4.1 Support the development and strengthening of existing networks, partnerships, and collaboration on malaria in the Region.

4.2 Optimize opportunities for synergy with other existing PAHO/WHO initiatives (e.g., integration of malaria efforts with maternal and child health in community and local health care programs; health promotion and education interventions; programs on neglected diseases; occupational health; among others) and policies (e.g., the San Salvador Protocol to the American Convention on Human Rights in the Area of Economic, Social, and Cultural Rights; the Convention on the Rights of the Child).

4.3 Strengthen and support efforts to identify and replicate best practices, including models of successful integration of cross-cutting issues.

4.4 Increase the participation and involvement of NGOs and the community, including women's groups, indigenous groups, and ethnic minorities.
4.5 Further strengthen research capability and the development of technologies and tools that apply to advocacy, communication, partnerships, and collaboration.
4.6 Promote and enhance opportunities for ongoing coordination and knowledge-sharing at all levels of activity (regional, sub-regional, and national).

Indicators

- Number of countries with social mobilization, multisectoral representation, and community involvement in their malaria plan and related activities. (Baseline: 21. Target: 21.)
- Number of endemic countries participating in regional-level networks and collaboration. (Baseline: 13. Target: 19.)
- Number of countries engaged in inter-programmatic and synergistic actions advocated under PAHO/WHO initiatives and policies. (Baseline: 13. Target: 19.)
- Number of countries with identified best practices in their malaria activities. (Baseline: 8. Target: 13.)
- Number of countries engaged in documenting and implementing a research agenda that focuses on advocacy, communication, partnerships, and collaboration. (Baseline: 8. Target: 13.)
- Number of annual and biannual meetings related to malaria coordination at the regional and sub-regional levels undertaken. (Baseline: 4. Target: 13.)

Goal 5: Optimize efforts to strengthen health systems (including strategic planning, monitoring and evaluation, operations research, among others) and the countries' capacity to address their respective malaria challenges both relevantly and adequately.

Objectives

5.1 Ensure adequate recruitment, training, and retention of malaria-trained personnel in the country health systems and within PAHO/WHO to facilitate relevant technical cooperation in various levels of work (regional, inter-country, and intra-country) and program contexts (including malaria elimination).
5.2 Advocate and facilitate inter-country (south-south) collaboration and exchange of experiences and best practices.
5.3 Collaborate with countries and stakeholders on malaria policy development and strategic planning.
5.4 Collaborate on monitoring and evaluation of programs.
5.5 Collaborate to increase the availability and accessibility of health infrastructure for the most affected populations.

5.6 Collaborate to strengthen the capacity of national programs in the areas of management, logistics, financing, and resource mobilization.
5.7 Assist in optimizing results and facilitating synergies in the implementation of externally funded malaria activities (e.g. Global Fund Projects) in the Region.
5.8 Advocate the development of financial strategies to sustain malaria control and elimination efforts at different levels.
5.9 Promote and emphasize the benefits of operations research in program development and management.

Indicators

- Number of countries designing and implementing training plans for malaria personnel. (Baseline: 17. Target: 21.)
- Number of countries engaging on south-south collaboration on malaria. (Baseline: 13. Target: 17.)
- Number of countries implementing WHO-recommended strategies and components of the PAHO Strategy and Plan of Action for Malaria. (Baseline: 28. Target: 33.)
- Number of countries integrating the monitoring and evaluation of malaria programs and interventions, within the general health information system. (Baseline: 10. Target: 17.)
- Number of malaria-endemic countries with functional supply chain management ensuring malaria prevention, control, diagnosis, and treatment capabilities. (Baseline: 13. Target: 17.)
- Number of malaria-endemic countries with clear, relevant, and fully functioning malaria programs based on PAHO/WHO guidelines. (Baseline: 20. Target: 21.)
- Number of countries implementing synergistic projects, including Global Fund projects, to finance malaria efforts based on PAHO/WHO strategies. (Baseline: 10. Target: 12.)
- Number of countries conducting malaria operational research. (Baseline: 10. Target: 15.)
- Number of new or improved interventions and implementation strategies for malaria whose effectiveness has been determined and evidence made available to appropriate institutions for policy decisions. (Baseline: 2 Target: 3.)

Time Frame

21. This Plan of Action will be implemented over the period 2012–2015.

Resources Required

22. Approximately $10 million, or an average of $2 million year, needs to be invested in PAHO technical cooperation on malaria over the period 2011-2015. This level of investment is essential in order for the institution to respond relevantly in its role of bridging gaps through technical cooperation and facilitating collaboration between countries and stakeholders in addressing the challenges of this disease that knows no borders.

23. Also, it must be noted that malaria elimination is going to entail sizable domestic and external resources as focus shifts away from large-scale interventions and large numbers of cases to high-quality efforts to deal with fewer cases and ultimately maintain zero cases of locally transmitted malaria.

Monitoring, Assessment, and Evaluation

24. This Plan of Action contributes to the achievements of PAHO's Strategic Plan's Strategic Objective 2[3] [4]. The specific Region-wide Expected Results to which this Plan of Action contributes are detailed in Annex D. The monitoring and assessment of this Plan will be aligned with the Organization's results-based management framework as well as its performance, monitoring and assessment processes. In this regard progress reports will be developed based on information available at the end of a biennium.

25. With a view to determine strengths and weaknesses of the overall implementation, causal factors of successes and failures, and future actions, a final evaluation will be conducted.

26. The baseline and targets for the indicators outlined in the strategic components section of the Plan are subject to agreement between the countries and other stakeholders. PAHO uses annual information shared by the countries through the PAHO/WHO malaria reporting system to assess the progress of activities. PAHO will also engage actively in developing consensus between national and international stakeholders in assessing and monitoring important indicators in various malaria program contexts.

Action by the Directing Council

27. The Directing Council is requested to review the Strategy and Plan of Action contained in the present document and consider approval of the proposed resolution attached as Annex C.

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[3] To combat HIV/AIDS, tuberculosis and malaria.
[4] For more information please consult the PAHO Strategic Plan.

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Information on Annual Country Malaria Reports and Percentage Changes to Circa 2009

The following table provides the latest information available from annual country malaria reports and the percentage changes to circa 2009, indicating positive or negative progress toward meeting the targets for reducing the incidence of malaria.

Country	Total number of cases	Percentage change since 2000*
Argentina	86	-80%
Belize	256	-83%
Bolivia	9,743	-69%
Brazil	308,498	-50%
Colombia	79,252	-45%
Costa Rica	262	-86%
Dominican Republic	1,643	+33%
Ecuador	4,120	-96%
El Salvador	20	-97%
French Guiana	2,800	-24%
Guatemala	7,080	-87%
Guyana	13,673	-43%
Haiti	49,535	+193%
Honduras	9,216	-74%
Mexico	2,703	-63%
Nicaragua	610	-97%
Panama	778	-25%
Paraguay	91	-99%
Peru	36,886	-46%
Suriname	1,371	-90%
Venezuela	35,725	+20%

Source: Annual country malaria reports circa 2009.
*A negative/positive percentage change corresponds to a decrease/increase in the total cases.

Implementation of the Three Main WHO Strategies

Country	Status of implementation of the three main WHO strategies
Argentina	• LLINs[5] are not currently being used. • IRS[6] is used for malaria prevention and control. • Treatment[7] is free of charge in the public sector.
Belize	• LLINs are used for malaria prevention and control. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Bolivia	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • ACT[8] is free of charge in the public sector.
Brazil	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • ACT is free of charge in the public sector.
Colombia	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • ACT is free of charge in the public sector.
Costa Rica	• LLINs are distributed free of charge to target populations. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Dominican Republic	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Ecuador	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • ACT is free of charge in the public sector.
El Salvador	• LLINs are used for malaria prevention and control. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
French Guiana	• LLINs are distributed to all age groups. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Guatemala	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Guyana	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • ACT is free of charge in the public sector.

[5] Long lasting insecticidal nets.
[6] Indoor residual spraying.
[7] Rapid treatment with antimalarial medicines.
[8] Artemisinin-based Combination Therapy.

Country	Status of implementation of the three main WHO strategies
Haiti	• LLINs are distributed to all age groups. • IRS is not currently used. • Rapid treatment with effective antimalarial medicine has been implemented.
Honduras	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Mexico	• LLINs are distributed to all age groups. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Nicaragua	• LLINs are distributed free of charge to target populations. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Panama	• LLINs are distributed free of charge to target populations. • IRS is used for malaria prevention and control. • Rapid treatment with effective antimalarial medicine has been implemented.
Paraguay	• LLINs are not currently being used. • IRS is used for malaria prevention and control. • Treatment is free of charge in the public sector.
Peru	• LLINs are used for malaria prevention and control. • IRS is used for malaria prevention and control. • ACT is free of charge in the public sector.
Suriname	• LLINs are distributed free of charge to all age groups. • IRS is used for malaria prevention and control. • ACT is free of charge in the public sector.
Venezuela	• LLINs are used for malaria prevention and control. • IRS is used for malaria prevention and control. • An ACT policy has been adopted.

Source: Annual country malaria reports circa 2009.

PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION

51st DIRECTING COUNCIL
63rd SESSION OF THE REGIONAL COMMITTEE

Washington, D.C., USA, 26-30 September 2011

Provisional Agenda Item 4.8

CD51/11 (Eng.)
Annex C
ORIGINAL: ENGLISH

PROPOSED RESOLUTION

STRATEGY AND PLAN OF ACTION FOR MALARIA

THE 51st DIRECTING COUNCIL,

Having reviewed the *Strategy and Plan of Action for Malaria* (Document CD51/11);

Recalling Resolution CD46.R13 (2005) of the 46th Directing Council on Malaria and the Internationally Agreed-upon Development Goals, including those contained in the Millennium Declaration;

Noting the existence of other relevant mandates and resolutions of the Pan American Health Organization, such as Document CD49/9 (2009), *Elimination of Neglected Diseases and other Poverty-related Infections*, which included malaria among the diseases that may be eliminated in some areas, and Document CD48/13 (2008), *Integrated Vector Management: A Comprehensive Response to Vector-borne Diseases*, which promotes integrated vector management as an integral part of vector-borne disease management in the Region;

Aware that the continuing decline in malaria cases and deaths affirms the Region's progress in combating malaria but also ushers in a unique set of important and evolving challenges for the Region;

Acknowledging that the diversity of the malaria context and challenges faced by the countries of the Region necessitates engagement in a comprehensive program with various combinations of components, together with evidence-based and innovative interventions;

Appreciating the efforts of Member States in recent years to address their respective challenges with malaria, but mindful of the need for further action,

RESOLVES:

1. To endorse the Strategy and approve the Plan of Action for Malaria.

2. To urge the Member States to:

(a) review national plans or establish new ones for the prevention, control, and potential elimination of malaria, employing an integrated approach that addresses the social determinants of health and provides for inter-programmatic collaboration and intersectoral action;

(b) support efforts to consolidate and implement activities to further reduce endemicity and progress toward meeting the targets indicated in the Strategy and Plan of Action for Malaria, including the elimination of malaria where this is considered feasible;

(c) strengthen engagement in efforts to address malaria, including coordination with other countries and relevant sub-regional initiatives in epidemiological surveillance of malaria, surveillance of resistance to antimalarial medicines and insecticides, and monitoring and evaluation;

(d) strengthen commitment by both malaria-endemic and non-endemic countries and by various sectors to fight the disease, particularly in terms of sustained or increased investments and provision of necessary resources;

(e) establish integrated strategies for prevention, surveillance, diagnosis, treatment, and vector control with broad community participation, so that the process helps to strengthen national health systems, including primary health care, surveillance, and alert and response systems, with attention to factors related to gender and ethnicity;

(f) strengthen focus on highly susceptible populations and occupational groups;

(g) support engagement in the development and implementation of a research agenda that addresses important knowledge and technology gaps in various contexts of malaria work in the Region; for example, the relationship between malaria and agriculture.

3. To request the Director to:

(a) support execution of the Strategy and Plan of Action for Malaria and provide such technical cooperation as the countries may require to develop and execute national plans of action;

(b) continue advocating for the active mobilization of resources and encouraging close collaboration to forge partnerships that support the implementation of this resolution;

(c) promote and strengthen technical cooperation among the countries, subregional entities and institutions, and form strategic partnerships to carry out activities designed to overcome barriers to malaria efforts in border areas and hard-to-reach populations;

(d) promote cooperation among countries for the production of and access to malaria drugs that meet internationally recognized quality assurance standards, and which are consistent with PAHO/WHO recommendations.

PAN AMERICAN HEALTH ORGANIZATION

Pan American Sanitary Bureau, Regional Office of the

WORLD HEALTH ORGANIZATION

CD51/11 (Eng.)
Annex D

Report on the Financial and Administrative Implications for the Secretariat of the Proposed Resolution

1. Agenda item: 4.8: Strategy and Plan of Action for Malaria.

2. Linkage to Program Budget 2010-2011

(a) Area of work: Health Surveillance and Disease Prevention and Control / Communicable Disease Prevention and Control (HSD/CD).

(b) Expected result:

RER 2.1: Member States supported through technical cooperation for the prevention of, and treatment, support and care for patients with HIV/AIDS, tuberculosis and malaria, including innovative approaches for increasing coverage of the interventions among poor people, hard-to-reach and vulnerable populations.

RER 2.4: Regional and national surveillance, monitoring and evaluation systems strengthened and expanded to track progress towards targets and resource allocations for HIV, malaria and tuberculosis control; and to determine the impact of control efforts and the evolution of drug resistance.

RER 2.5: Member States supported through technical cooperation to: (a) sustain political commitment and mobilization of resources through advocacy and nurturing of partnerships on HIV, malaria and tuberculosis at country and regional levels; (b) increase the engagement of communities and affected persons to maximize the reach and performance of HIV/AIDS, tuberculosis and malaria control programs.

RER 2.6: New knowledge, intervention tools and strategies developed, validated, available, and accessible to meet priority needs for the prevention and control of HIV, tuberculosis and malaria, with Latin American and Caribbean countries increasingly involved in this research.

3. Financial implications

(a) Total estimated cost for implementation over the life cycle of the resolution (estimated to the nearest US$ 10,000, including staff and activities):

Approximately US $10,000,000 or an average of $2,000,000 annually (from regular budget and/or extrabudgetary funds) needs to be invested in PAHO technical cooperation on malaria for the period 2011-2015. This level of investment is essential in order for the institution to respond relevantly in its role of bridging gaps through technical cooperation and facilitating collaboration among countries and stakeholders. in addressing the challenges. However, it is considered that greater resources will be needed as the Region becomes more aggressive in pursuing malaria elimination goals.

(b) Estimated cost for the biennium 2012-2013 (estimated to the nearest US$10,000, including staff and activities):

Based on historical program implementation rates and costs, $4,000,000 will be the appropriate biennial budget for PAHO malaria efforts in the Region.

(c) Of the estimated cost noted in *(b)*, what can be subsumed under existing programmed activities?

Current programmed activities cover all components of the strategy, but they are on a decreased scale of $2,000,000 for the biennium. Increasing the scale of efforts and financial support will optimize achievement of targets and desired results.

4. Administrative implications

(a) Levels of the Organization at which the work will be undertaken:

Regional, sub-regional, and country levels.

(b) Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile):

Current malaria regional staff and communicable disease country focal points with appropriate skills in policy development; program planning and implementation; and monitoring and evaluation must be sustained throughout the lifetime of the plan. Additional staff requirements: Sub-regional Advisers for Central America, South America, and Hispaniola.

(c) Time frames (indicate broad time frames for implementation and evaluation):

2012 - 2015

ANALYTICAL FORM TO LINK AGENDA ITEM WITH ORGANIZATIONAL MANDATES
1.Agenda item: 4.8: Strategy and Plan of Action for Malaria
2. Responsible unit: Health Surveillance and Disease Prevention and Control / Communicable Disease Prevention and Control (HSD/CD) **3. Preparing officer:** Keith Carter
4. List of collaborating centers and national institutions linked to this Agenda item: • National government agencies. • Sub-regional initiatives: Health Surveillance Commission; Working Group on Health (SGT-11), Southern Common Market (MERCOSUR); Andean Epidemiological Surveillance Network (RAVE); Andean Health Agency-Hipólito Unanue Agreement (ORAS-CONHU); Health Surveillance and Response Network; Union of South American Nations (UNASUR); Council of Central American Health Ministers (COMISCA); Special Meeting, Health Sector of Central America and the Dominican Republic (RESSCAD); and the Caribbean countries, through the Caribbean Epidemiology Center (CAREC); among others. • United Nations agencies: WHO Global Malaria Program; United Nations Environment Program (UNEP), among others. • Multilateral and development partners: Roll Back Malaria (RBM) Partnership; Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM); U.S. Agency for International Development; International Development Bank (IDB), among others. • Research and academic community: U.S. Centers for Disease Control and Prevention (CDC); International Research Institute for Climate & Society (IRI); Earth Institute at Columbia University (WHO Collaborating Center for Early Warning Systems for Malaria and Other Climate-sensitive Diseases); United States Pharmacopeia (USP); Special Program for Research and Training in Tropical Diseases (TDR); Instituto Salud Global (ISGlobal); Centro Latinoamericano de Investigaciones en Malaria (CLAIM); International Development Research Center (IDRC); George Washington University Center for Global Health (GWU-CGH); and universities, national research institutes, among others. • Nongovernmental organizations: Management Sciences for Health (MSH); Links Media; Research Triangle Institute (RTI); country-based NGOs, other foundations, and the private sector, among others. • Other PAHO entities: Country Focus Support (CFS), External Relations, Resource Mobilization, and Partnerships (ERP), Family and Community Health (FCH), Health Systems Based on Primary Health Care (HSS), Gender, Diversity and Human Rights (GDR), Knowledge Management and Communication (KMC), Pan American Health and Education Foundation (PAHEF), Emergency Preparedness and Disaster Relief (PED), Sustainable Development and Environmental Health (SDE), among others.

5. Link between Agenda item and Health Agenda for the Americas 2008-2017:

The Strategy and Plan of Action for Malaria aligns strongly with the principles of the Health Agenda for the Americas 2008-2017. Moreover, its strategic components reflect the fact that most of the action areas indicated in the Health Agenda of the Americas—namely: strengthening the national health authority; increasing social protection and access to quality health services; diminishing health inequalities between countries, as well as inequities within them; reducing the risk and burden of disease; strengthening the management and development of health personnel; and harnessing knowledge, science, and technology—apply to the specific challenge of malaria.

6. Link between Agenda item and Strategic Plan 2008-2012:

Malaria, together with HIV and tuberculosis, is an integral part of Strategic Objective 2.

Also, activities that address malaria are strongly linked to Strategic Objectives 1, 4, 5, 7, 8, 10, 11, 12, 13, 14, and 15.

7. Best practices in this area and examples from countries within the Region of the Americas:

Best practices and excellent examples of effective efforts to address malaria in the Region and in the countries include:

- Amazon Network for the Surveillance of Antimalarial Drug Resistance / Amazon Malaria Initiative (RAVREDA/AMI). Available from: http://new.paho.org/hq/index.php?option=com_content&task=view&id=2231&Itemid=2150.
- Malaria Champions of the Americas (examples from Brazil, Colombia, Ecuador, México, and Suriname). Available from: http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=1952&Itemid=2118.

8. Financial implications of this Agenda item:

Approximately US $10,000,000, or an average of $2,000,000 annually, needs to be invested in PAHO technical cooperation on malaria over the period 2011-2015. This level of investment is essential in order for the institution to respond relevantly in its role of bridging gaps through technical cooperation and facilitating collaboration among countries and stakeholders.

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