



# **USAID-PAHO UMBRELLA GRANT AGREEMENT 2016-2023**

**GRANT No. AID-OAA-IO-16-00003  
(PAHO GRANT No. 002146)**

## **ANNUAL REPORT**

**OCTOBER 2021 - SEPTEMBER 2022**

**REPORT DATE: DECEMBER 1, 2022**



**KEY TECHNICAL PERSONNEL**

**ADRIENNE COX (EIH)**  
**ANA LUCIANEZ (CDE)**  
**ANA MORICE (CDE)**  
**ANDRES DE FRANCISCO (FPL)**  
**ANTONIO SANHUEZA (EIH)**  
**BREMEN DE MUCIO (CLAP/SMR)**  
**CAROLINA HOMMES (FPL)**  
**ERNESTO BASCOLO (HSS)**  
**ERNESTO MONTORO (CDE)**  
**ENRIQUE VEGA (FPL)**  
**JOSE GARCIA GUTIERREZ (HSS)**  
**LUIS GERARDO CASTELLANOS (CDE)**  
**MARCELO D'AGOSTINO (EIH)**  
**MARIA PAZ ADE (CDE)**  
**MARTHA SABOYA (CDE)**  
**MÓNICA RONDÓN**  
**NATALIA HOUGHTON (HSS)**  
**RUBEN MAYORGA (CDE)**  
**PABLO DURAN (CLAP/SMR)**  
**PEDRO AVEDILLO (CDE)**  
**ROBERTO MONTOYA (CDE)**  
**RONALDO SCHOLTE (CDE)**  
**SANTIAGO NICHOLLS (CDE)**  
**SONJA CAFFE (FPL)**  
**SUZANNE SERRUYA (CLAP)**  
**YURANI SANDOVAL (HSS)**  
**GRANT MANAGER – MARCOS ESPINAL (CDE)**  
**GRANT COORDINATOR – HANNAH KURTIS (CDE)**

## TABLE OF CONTENTS

<b>LIST OF ACRONYMS AND ABBREVIATIONS</b> .....	<b>4</b>
<b>1. PROJECT SUMMARIES: ACHIEVEMENTS, KEY ACTIVITIES AND DELIVERABLES, LESSONS LEARNED AND CHALLENGES</b> .....	<b>6</b>
TOPIC 1: TUBERCULOSIS .....	6
TOPIC 2: MALARIA .....	8
TOPIC 3: NEGLECTED INFECTIOUS DISEASES.....	12
TOPICS 4-6, 8 (ORIGINALLY): HEALTH INEQUITIES.....	14
TOPIC 7: HEALTH INFORMATION SYSTEMS .....	21
<b>2. INTER-PROGRAMMATIC EFFORTS</b> .....	<b>23</b>
<b>3. PROGRESS TOWARD GRANT OUTCOME INDICATORS</b> .....	<b>25</b>
<b>4. PRODUCTS DEVELOPED DURING CURRENT PROJECT PERIOD</b> .....	<b>33</b>
<b>5. PAHO-USAID COLLABORATION SUCCESS STORIES</b> .....	<b>37</b>

## List of Acronyms and Abbreviations

ACT	Artemisinin-based combination therapy
CDE	Communicable Diseases and Environmental Determinants of Health Department
CLAP	Latin American Center for Perinatology
DTI-R	Detection, Treatment, Investigation and Response Strategy
E2025	Malaria elimination countries
EGC	Equity, Gender, and Cultural Diversity Unit (PAHO)
EIH	Evidence and Intelligence for Action in Health Department (PAHO)
EMS	Epidemiology Monitoring Survey
ENAP	Every Newborn Action Plan
EPHF	Essential Public Health Functions
EQAP	External Quality Assurance Program
EWEC-LAC	Every Woman Every Child-Latin America and the Caribbean
FPL	Family, Health Promotion and Life Course Department
GF	The Global Fund
GTR	Regional Task Force on Maternal Mortality Reduction
HIS	Health Information Systems
HIV	Human Immunodeficiency Virus
HSS	Health Systems and Services Department (PAHO)
IDA	Triple-drug treatment regimen
IDB	Inter-American Development Bank
IPE	Interprofessional education
IS4H	Information Systems for Health
LAC	Latin America and the Caribbean
LF	Lymphatic Filariasis
LLIN	Long-lasting insecticide nets
MAF-TB	Multisectoral Accountability Framework
MDA	Mass Drug Administration
MDGs	Millennium Development Goals
Mf	Microfilaremia
MMWG	Metrics and Monitoring Working Group
MNM	Maternal Near Miss
MOH	Ministry of Health
MoPH	Ministry of Public Health
MPDSR	Maternal and Perinatal Death Surveillance and Response
NID	Neglected Infectious Diseases
NTP	National Tuberculosis Program
PAHO/WHO	Pan American Health Organization/World Health Organization
PCT	Preventative chemotherapy
PHC	Primary Health Care
PSIWG	Policies, Strategies, and Interventions Group
RBM	Roll Back Malaria
RDTs	Rapid Diagnostic Tests
RELAC SIS	Latin American and Caribbean Network for Health Information Systems
RMEI	Regional Malaria Elimination Initiative
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health

SP	Strategic Plan
SCH	Schistosomiasis
SDGs	Sustainable Development Goals
SIP	Perinatal Information System
STH	Soil-Transmitted Helminthiases
TAG	Technical Advisory Group
TB	Tuberculosis
TT	Trachomatous Trichiasis
TWG	Technical Working Group
UH	Universal Health
UHC	Universal Health Coverage
UNF	United Nations Foundation
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCPH	PAHO's Virtual Campus of Public Health
WHO	World Health Organization
PSIWG	Working Group on Policies, Strategies, Interventions

This Annual Report for the Grant Agreement between the Pan American Health Organization/World Health Organization (PAHO/WHO) and the United States Agency for International Development (USAID) covers the sixth year of the agreement, the period from October 2021 to September 2022. This year marked the first no-cost extension period of the grant to account for the technical and financial disruptions experienced as repercussions of the COVID-19 pandemic (Amendment 14). Through Amendment 14, the total estimated cost of the grant was also raised, to support the implementation of Year 6 workplans and fund additional country support for COVID-19 response (reported separately). In June 2022, the grant duration was extended for one additional year (Amendment 19) primarily to allow for continued implementation of on-going COVID response activities. The grant will now expire in September 2023.

This report is divided into five sections; the first section highlights the main achievements, key activities and deliverables, lessons learned and challenges from the sixth year of the grant; the second section provides some examples of inter-programmatic efforts that have taken place, the third section provides an overview of progress made toward achieving the outcome indicators as established in the original grant agreement; the fourth section provides a list of products developed during this last year; and the final section includes a compilation of selected public health success stories from across the region which have benefited from the PAHO-USAID collaboration.

In many ways, the 2021-2022 grant period marked a return to a “new-normal” for the technical teams implementing USAID-supported workplans in the region of the Americas. While some key in-person activities resumed following the loosening of pandemic-restrictions, virtual technologies also continued to be utilized as cost-effective tools to advance public health agendas and expand the reach of technical cooperation activities and trainings. This combination of approaches has enriched PAHO’s portfolio of support to its Member States and is one positive lesson learned coming out of the pandemic. PAHO is incredibly appreciative of USAID’s invaluable support of public health in the Americas and looks forward to future collaborations during 2022-2023 and beyond.

## **1. Project Summaries: Achievements, Key Activities and Deliverables, Lessons Learned and Challenges**

### **Topic 1: Tuberculosis**

Tuberculosis (TB) continues to be a public health problem in the region. According to the latest WHO estimates, approximately 309,000 incident cases and 32,000 deaths occurred in the region in 2021. During that year, 213,212 new and relapse TB cases were notified to PAHO/WHO by countries, leaving an estimated gap of 95,600 undiagnosed and untreated cases. The COVID-19 pandemic has reversed years of progress in providing essential TB services and reducing TB disease burden.

Eleven percent (11%) of TB cases were coinfecting with HIV and 4,798 drug resistant TB cases were reported. Based on the most recent data, 14 countries are now considered high burden, reporting 90% of the cases in the region, while 14 countries had  $\leq 10$  cases per 100,000 population. The more vulnerable populations for TB in the region are indigenous people, persons deprived of liberty, children, and people living in the streets, among others. TB patients with comorbidities, namely HIV, diabetes mellitus, mental health disorders and addictions are also at greatest risk of complications, lost to follow-up and death.

As in prior years, the project interventions used during the reporting period were framed by the End TB Strategy and the commitments of the 2018 United Nations High Level Meeting on TB. They aim to accelerate actions

towards TB elimination by addressing vulnerable populations and comorbidities, using innovation and inter-programmatic and intersectoral approaches, and involving communities and civil society.

The **main achievements** during year six of the grant include:

- Despite the ongoing COVID-19 pandemic:
  - provision of technical support to countries through virtual formats like TB monitoring visits, workshops, trainings, and meetings.
  - continued communication with countries, advisory groups, partners, and civil society through periodic regional virtual sessions to update and discuss the latest global and regional recommendations, and through periodic individual sessions with countries to plan activities.
- Continued advocacy for TB through development, adaptation, translation, dissemination and participation in related World TB Day commemoration materials and activities.
- Advocacy, follow up and support to countries for the adoption and implementation of the WHO's Multisectoral Accountability Framework (MAF-TB) to accelerate the implementation of the End TB Strategy and the commitments of the UN High Level Meeting on TB in coordination with national stakeholders.
- Development, finalization and/or translation of WHO and PAHO technical documents, reports and tools that facilitate the implementation of interventions to address TB prevention and control in countries with a special focus on vulnerable populations.
- Support to countries to strengthen how TB is approached and managed in vulnerable populations, such as indigenous peoples and persons deprived of liberty.
- Strengthening capacity for TB prevention and control through sponsoring the participation of young professionals in international TB and MDR-TB virtual training courses.
- Support to countries for conducting catastrophic cost surveys that provide inputs for advocacy to develop and include TB patients in social protection programs.
- Continued coordination and involvement of civil society groups and leaders through the implementation of the ENGAGE TB approach in several countries.
- Continued support for human resources for the Regional TB Team and its capacity to provide technical support to countries, including the PAHO/USAID TB fellow.

**Key activities and deliverables** that resulted in the main achievements described above include:

- TB monitoring visits conducted to Ecuador (October 2021), Dominican Republic (April 2022), and Belize (May 2022), and TB epi-reviews to El Salvador, Ecuador (October 2021), Argentina (October-November 2021), Honduras (August 2022), and Colombia (September 2022). Epi-review to Paraguay is already scheduled for November 2022.
- Ongoing support for the implementation of recommended interventions made during TB monitoring visits and TB epi-reviews conducted during prior years in Dominican Republic, Guatemala, Jamaica, and Peru.
- Virtual regional workshop on the WHO updated guidelines on the management of TB in children and adolescents.
- Virtual visits on the implementation of the regional guidance on TB in indigenous populations: follow-up visit to Colombia (June 2022) and initial virtual visits to introduce and initiate implementation in Peru (June 2022), Ecuador, and Honduras (July 2022), and Suriname (August 2022). Support was also provided to Argentina for the implementation of recommended interventions made during the virtual visit conducted in 2021.
- Finalization of the draft of the updated Regional Guidance on TB in prisons and virtual visits to obtain inputs from countries and introduce and initiate implementation in El Salvador (June 2022), Paraguay (August 2022), and Peru, Costa Rica, and Ecuador (September 2022).
- Support for the mapping of civil society organizations and national workshops for the implementation of the ENGAGE TB approach in Paraguay, Honduras, Argentina, Ecuador, and Uruguay.

- Development, adaptation, translation, and dissemination of World TB Day commemoration materials.
- Sponsorship of young professionals to participate in the regional MDR-TB training course held jointly with ALOSA TB in November 2021 and the regional course on epidemiology and TB control held in April 2022.
- Publication of the annual Regional TB Report 2020 in English and Spanish; the 2021 version is being finalized.
- Monitoring visit to Bahamas in April 2022, as a country reaching low TB incidence level.
- Ongoing support for the implementation of the MAF-TB in Colombia, Peru, El Salvador, and Mexico.
- Implementation of TB catastrophic cost surveys in Argentina, Colombia, Honduras, Dominican Republic, Guatemala, and Chile.
- Finalization of the draft of the e-learning course on TB/HIV clinical management in English and Spanish (to be published in November 2022).
- Development or updating national TB plans in Costa Rica, Dominican Republic, and Mexico.
- Follow-up and support the implementation of the initiative of TB control in large cities in El Salvador, Colombia, Mexico, and Ecuador and initial introduction in Bolivia.
- Participation of regional TB Team in the virtual Union Conference in October 2021.

During the reporting period these were the key **lessons learned and challenges**:

- Despite restrictions due to the COVID-19 pandemic, most planned activities can be conducted virtually. However, some activities had to be delayed or postponed and they required close follow up as countries are still intensely focused on recovering from the impact of the pandemic.
- The teleworking setting has raised the demands of technical support from countries, partners, civil society, and others, due to the easy accessibility of virtual platforms.
- The current virtual scenario has continued to produce savings that have required redirecting funds to support activities like training and translation.
- The COVID-19 pandemic has affected not only provision of services but also the supply chain for TB services and products. Nonetheless, national TB programs continue to be resilient.

## Topic 2: Malaria

After the increase in malaria transmission reported in the Americas between 2015 and 2019, during the COVID-19 pandemic the Region reported an overall reduction in the number of cases, but in a context of health service disruptions and a general decrease in examined cases. The recent resumption of more typical population dynamics is imposing the threat of increased cases or outbreaks in elimination countries (E2025) such as Honduras, Costa Rica, and Panama.

During 2021-2022, the COVID-19 pandemic continued to affect technical cooperation and the malaria response in the countries. At the national level, the pandemic's effects included a change in political priorities and disruptions in operational structures and logistics. Within this context, during Year 6 of the grant, PAHO worked to support specific efforts to respond to challenging situations in eight of the ten E2025 countries, while influencing operational changes in the countries with the highest malaria burden in South America. In these high burden countries, determinants such as gold mining and scarcity of services in hard-to-reach, indigenous populations remain key challenges.

The Year 6 workplan incorporated the priorities coming out of the regional consultation process for the Regional Plan of Action conducted in Year 5, contributing to the following main topics: improvements in malaria diagnosis; antimalarial drug supply and policies; microstratification; malaria data reporting and analysis; the



detection, treatment, investigation and response (DTI-R) strategy; improvements in vector control interventions; and cross-cutting strategies such as the platform to support actions in municipalities with a high malaria burden.

Additionally, the grant helped to advance work with specific groups of countries such as those within the Guiana Shield and areas where innovation and operational changes can be expected in the coming years, including radical cure in *P. vivax* and the implementation of chemotherapy actions in elimination scenarios. In this way, the grant continues to be of major importance for PAHO to be able to develop the strategic technical elements of the Plan of Action and promote changes in the countries, including the adaptation of WHO recommendations in the region.

During the 2021-2022 period, PAHO continued aligning this agreement with the Global Fund (GF) efforts and the Regional Malaria Elimination Initiative (RMEI) actions, other USAID partners, and in general to channel the actions of different partners towards mutual, agreed-upon, regional technical goals to optimize the use of resources and catalyze opportunities.

The **main achievements** that stand out during the sixth year of the grant include:

#### **Outcome 2.1: Access to malaria diagnosis and treatment and integrated vector management (IVM) interventions**

- Diagnosis and treatment guidelines reviewed and updated (Belize, Suriname, Dominican Republic).
- Support provided to Belize, El Salvador, Costa Rica, Ecuador, Suriname with diagnosis quality assurance activities.
- Results received on the *HRP2/3* deletion study following WHO protocol that was implemented in Colombia.
- A regional agenda to improve policies on radical cure in *P. vivax* was developed, including building consensus with partners in a regional working group and collaboration with IMPACT malaria for a double dose primaquine study in Colombia.
- Because of the procurement and distribution of antimalarials and RDTs from PAHO's CDE/VT regional warehouse in Panama, critical situations of shortages were prevented in a context with significant delays in supply due to global effects on supply chains.

#### **Outcome 2.2: Malaria surveillance**

- Timely and effective support provided to countries to contain outbreaks related to the disruptions generated during COVID-19 (Kaukira in Honduras) and that are a challenge in the last mile towards elimination (Dominican Republic, Costa Rica).
- In complementarity with RMEI, countries under this initiative and others in South America (Ecuador, Bolivia, Suriname, Guyana) made significant progress implementing microstratification analysis to organize “early detection, timely investigation, and prompt response” activities in main foci (Honduras- Gracias a Dios; Panama- Puerto Obaldia; Colombia – Choco; Guyana; Costa Rica; Bolivia- Guayamerin; Dominican Republic; Haiti- Grand’Anse; Guatemala; Suriname).
- Progress made towards the implementation of online malaria information systems and dashboards to promote real time analysis and better-informed decisions at the local and national level.
- Malaria information from 2020 included in WMR 2021 and by the end of Year 6 the data collection process for the 2022 WMR had concluded.
- In complementarity with RMEI, a methodology was implemented to evaluate the absence of transmission at subnational level in countries in Central America and South America.

### **Outcome 2.3: Strategic planning, monitoring and evaluation; partnerships and collaborations; and tailored approaches towards malaria elimination**

- During the YR6 period, Belize completed three years without malaria transmission. The country received permanent support from PAHO to maintain surveillance and preparatory activities for certification as a malaria-free country are currently underway. By the end of 2022, Suriname could also complete a first year without indigenous malaria transmission.
- The Region's malaria advocacy platforms have managed to adapt with strong collaboration from partners. Malaria Day and Malaria Champions were held virtually on 5 November 2021, with the participation of more than 850 people from more than 40 countries and 43 organizations. A consultation process was held in 2022 to rethink the initiative to achieve more participation from countries and the malaria community.
- A joint action from the Guiana Shield countries was reactivated through two meetings (October 2021 and May 2022) where the updated framework was reviewed, and agreements were made on measures to improve the exchange of information between countries.
- A framework for the implementation of malaria chemoprevention actions in the Americas was developed with a draft of a technical document and protocol, regional meeting, and technical sessions with specific countries.
- PAHO technical cooperation led to policy actions advocating for financial solutions within Ecuador and towards allowing voluntary collaborators to diagnose and treat malaria cases in Costa Rica and Ecuador.

**Key activities and deliverables** that resulted in the main achievements during the 6<sup>th</sup> year of the grant include:

### **Outcome 2.1: Access to malaria diagnosis and treatment and integrated vector management (IVM) interventions**

- Actions to improve passive case detection were conducted, including training local teams and community health workers (Brazil, Honduras, Ecuador, Dominican Republic, Haiti, and indigenous communities in Maynas and Daten del Maranhon, Peru), organizing local networks in key foci (Colombia, Dominican Republic), approaching cultural barriers on care seeking behavior issues (Panama), and improving regulatory frameworks (Costa Rica).
- The 9<sup>th</sup> Round panel of the External Quality Assurance Program (EQAP) for malaria microscopy shipped to 23 participant laboratories.
- Support provided from the supranational laboratories of Honduras and Peru with slide panel preparation and shipment to various countries to support quality assurance activities (trainings, direct control, NCAMM).
- Microscopists retrained and certified by national laboratories following PAHO SOPs for the National Competency Assessment on malaria microscopy (Ecuador, Honduras, Dominican Republic) and quality assurance guidelines developed or updated (Ecuador, Dominican Republic).
- National level guidelines developed/disseminated to improve the use of RDTs (Ecuador, Dominican Republic); a proposal was developed to improve operational monitoring of RDTs (Costa Rica); and actions conducted to support the use of RDTs in key foci or districts (Guyana, Ecuador, Haiti).
- *Plasmodium falciparum* molecular surveillance (Propeler *Kelch* 13 C580Y mutation) conducted with Institute Pasteur's support at 12 sites in Guyana with no novelties reported.
- Materials to improve treatment adherence and pharmacovigilance shared with Member States (designed envelopes to be implemented in Peru, and initiated discussions to adopt them in Bolivia).
- Support provided for the development of an online tool to calculate needs of antimalarial and key commodities, QUANMED-Malaria, in coordination with PAHO's HSS/MT Unit.

- Technical support provided to integrate long-lasting insecticide nets (LLIN) distribution with the microstratification approach (Guyana, Dominican Republic), communication actions conducted to improve the use of LLINs in the Pacific coast in Colombia, and support provided to adapt the methodology for the evaluation of LLINs use in Bolivia.
- Guidance provided on planning entomological evaluations in sentinel sites in Ecuador, Costa Rica, Colombia, and Dominican Republic, and on guiding selection of vector control interventions and insecticides (Honduras, Panama, Dominican Republic).
- A virtual training course (five modules) on entomological surveillance and vector control was developed for field workers (Costa Rica).

#### **Outcome 2.2: Malaria surveillance**

- Support provided to improve local surveillance in high burden municipalities or areas experiencing an increase in cases (Bolivia, Brazil, Colombia, Peru, Costa Rica, Ecuador, Guatemala, Honduras-Kaukira, Dominican Republic-San Juan de la Maguana) and border areas (Darien area, Honduras, and the border between Costa Rica and Nicaragua).
- Progress made in restructuring the malaria module on the PAHO information platform, including country collaboration sites and procedures for the automation of weekly data collection on malaria cases in the countries for the current year.
- Progress made developing the DHIS-2 case management module for Suriname and initial steps with the Ministry of Health in Guyana. In collaboration with CHAI, community health workers and departmental epidemiological surveillance officers were trained on the DHIS2 Capture in Haiti (Grand'Anse).

#### **Outcome 2.3: Strategic planning, monitoring and evaluation; partnerships and collaborations; and tailored approaches towards malaria elimination**

- Actions conducted to improve coordination of malaria programs with health services in key foci toward the inclusion of malaria diagnosis and treatment in primary care facilities (Brazil, Honduras, Ecuador, Dominican Republic, Guatemala). In Costa Rica and Dominican Republic, technical support and training provided to organize case management flows and processes in the system, incorporating the principles of DTI-R.
- Malaria Technical Advisory Group renewed for two years and preparation of the technical agenda for the meeting in December 2022 initiated.
- Along with Breakthrough Action, support provided in Guyana amassing best practices from the field. Tools developed to improve communication with Miskito population in Honduras.
- Malaria interventions in high burden municipalities were supported (Brazil, Colombia, Honduras, Haiti, Peru Guatemala).
- National stratification reviewed and updated (Bolivia, Dominican Republic, Suriname, Ecuador). Stratification principles promoted by PAHO included in the National Elimination Plan updated in Brazil.
- Local teams and subnational levels trained in implementing microstratification, microplanning and other key changes on malaria operations (Brazil, Bolivia, Guyana, Costa Rica, Dominican Republic, Haiti, Colombia, Guatemala).
- Paraguay supported in the elaboration of a new strategic plan for prevention of reestablishment and Chile supported in defining strategic lines to prevent reestablishment. Microstratification in Bolivia included approaches to prevent reintroduction of *P. falciparum* at subnational level.

During the reporting period these were the key **lessons learned**:

- Efforts should continue to seek complementarity of USAID support with other initiatives (RMEI, DATA SI Global Fund project) that also contribute to the Regional Plan and share common objectives.
- USAID-supported work to organize the malaria operation at the local level has served to catalyze the efforts of other partners.
- The new WHO recommendations on chemoprevention, despite being conditional and of low evidence, may be an important element of change and operational innovation that will require technical cooperation in 2023.
- The evidence of the growing problem of *P. falciparum* malaria resistance in Africa, together with the achievements in elimination of this species in the GMS (Mekong) in Asia, exposes the need for a technical and political discussion on an action with higher impact on this parasite in the Americas.
- The strategy of the high-burden municipalities has not had the expected impact. It is necessary to focus more technical cooperation and mobilize more concrete actions in these high-transmission foci, particularly in large countries.
- The Malaria Champions rethinking process carried out in 2022 has exposed new ideas and opportunities for more participatory action and higher impact in the field of malaria advocacy in the Region.

In addition, the following **challenges** to implementation were encountered:

- During 2021 and 2022, the ongoing restrictions imposed by the pandemic on field activities by ministries of health and the attention demanded by the COVID-19 response were a continuing challenge for work in malaria.
- Travel restrictions for the mobilization of international consultants and advisors have limited progress in some activities.
- Legal and regulatory barriers persist to ensure early diagnosis and treatment for all communities, for example, the implementation of diagnosis (RDTs) and treatment by community agents.
- Supply management, particularly the correct estimation of needs and purchasing processes, continues to be an issue in some countries.
- Progress in addressing malaria transmission and gold mining within this agreement has been limited during the pandemic due to other priorities of national counterparts. It is necessary to address this topic with regional and national actors who can draw the political attention that is required.
- The social situation in Haiti and in other contexts such as along the Colombia and Panama border (Darién) may pose important challenges to maintain and consolidate achievements in the fight against malaria.

### Topic 3: Neglected Infectious Diseases

Neglected infectious diseases (NID) are related to poverty and income inequality, imposing a large burden on marginalized populations globally and in the Americas. It is estimated that in 2021 approximately 201 million people lived in poverty and 86 million in extreme poverty. Due to the COVID-19 pandemic, extreme poverty in the region has reached levels not seen for the last 27 years. In 2020, at least 25% of the approximately 654 million inhabitants of Latin America and the Caribbean lacked access to safely managed drinking water services and 66% lacked access to safely managed sanitation facilities.

In 2016, PAHO's Directing Council approved the "Plan of Action for the Elimination of NIDs and Post-elimination Actions 2016-2022". In 2019, PAHO's Directing Council approved the "Disease Elimination Initiative: a policy for an integrated sustainable approach to communicable diseases in the Americas" which sets the goals of

eliminating, by 2030, more than 30 communicable diseases and related conditions, including some of the NID. PAHO's targets are aligned with those of the WHO NTD Roadmap 2021-2030.

PAHO's NID Program provides technical cooperation to strengthen national capabilities to develop integrated plans of action and implement effective programs, strategies, and interventions to advance towards their control or elimination.

The **main achievements** to highlight during the sixth year of the PAHO-USAID umbrella grant in NID include:

#### **Lymphatic Filariasis Elimination in Guyana**

- After the two successful rounds of MDA-IDA in Guyana, an Epidemiology Monitoring Survey (EMS) was implemented in regions 2,3,4,5,6 and 10 in the last quarter of 2021. In 11 out of the 13 EUs, the number of microfilaremia (Mf) positive participants was below the 1% cutoff value and in 2 of them the results were borderline. An IDA impact survey (IIS) will be carried out in the first quarter of 2023, following a protocol developed in 2022, in all endemic regions using geostatistical sampling, an innovative, robust, and efficient methodology.

#### **Trachomatous trichiasis (TT) surgeries in Guatemala**

- Thirty of 45 identified cases of TT were operated on to prevent irreversible blindness. People who were diagnosed with other eye diseases such as cataracts, pterygium, and refractive errors were referred to receive integrated eye health care. Please see detailed information in the accompanying "Success Story" at the end of this report.

#### **Trachoma toolbox**

- A "Toolbox for trachoma elimination in the Americas Region" was finalized and published, in Spanish, with the purpose of adapting international recommendations to the Region of the Americas. The toolbox has 4 modules: 1) trachoma rapid assessments, 2) TT-case active finding, 3) monitoring and follow up of TT cases, 4) planning and organization of TT surgery campaigns. The toolbox is currently being translated into Portuguese.

#### **Microplanning manual to guide the implementation of preventive chemotherapy to control and eliminate neglected tropical diseases**

- The "Microplanning manual to guide implementation of preventive chemotherapy to control and eliminate neglected tropical diseases" was developed under the joint leadership of the PAHO/CDE/VT unit and WHO/NTD, in collaboration with RTI International, the CDC and USAID. The English version of the Manual was finalized and published. The translation into Spanish is being finalized and is expected to be published online by the end of 2022. The manual describes the basic concepts of microplanning, steps, and examples of tools to develop and implement a microplan.

#### **Schistosomiasis surveys in the Dominican Republic**

- The surveys were implemented in November-December 2021. Children and adults were sampled in the historically known endemic areas for schistosomiasis in the Dominican Republic. The samples are being processed and the results are pending.

#### **Schistosomiasis intermediate host snail survey in Saint Lucia**

- A survey to determine the role of snail intermediate hosts in the transmission of schistosomiasis in Saint Lucia was carried out in the third quarter of 2022. The results are being analyzed and a final report is

expected to be available by the first quarter of 2023. Surveys in children and adults are being planned, also as part of the process to assess if elimination of transmission of schistosomiasis has been achieved.

During the reporting period these were the key **lessons learned**:

- The capacity building process that has taken place in Guyana since the inception of the LF elimination project, has empowered the national program and enabled the country to implement effective rounds of IDA and to implement EMS (preTAS), even though the pandemic prevented in-person support. The country's response to the technical cooperation efforts has yielded very positive results.
- The successful implementation of interventions for the control or elimination of NID, such as surveys and MDA, is feasible even under the restrictions imposed by the COVID-19 pandemic, if appropriate planning, microplanning, organization, and follow-up is ensured. In some countries the restarting of NID actions during the pandemic has been slower than in others. PAHO's NID team adopted several modalities to remotely support countries to move forward on the implementation of actions.
- The creation of alliances and joint work with partners has been a key strategy for the development of the microplanning manual (RTI, CDC, USAID, ENDFUND, etc.), taking advantage of the experience that has been implemented in the countries (Guyana and Haiti).
- The implementation of innovative interventions, such as the IDA, highlighted the need to develop more efficient, robust, and innovative M&E methodologies, such as the IIS protocol using geostatistical sampling developed in collaboration with TFGH, CDC and Lancaster University.

In addition, the following **challenge** to implementation was encountered:

- Pandemic restrictions impacted all interventions for NID control and elimination throughout the region. During the second half of 2021 and in 2022, the national NID programs have had a gradual recovery from the negative impacts of the pandemic. To date, most countries have resumed their MDA activities and some countries have either carried out or are planning to undertake impact assessment surveys for lymphatic filariasis, soil-transmitted helminthiasis, schistosomiasis, and trachoma.

## Topics 4-6, 8 (originally): Health Inequities

This year marked the third iteration of an inter-programmatic workplan to support the countries of Latin America and the Caribbean in accelerating their efforts to eliminate social inequities in health. The workplan focuses on three strategic lines of effort, namely to:

- i. Promote the measurement and documentation of social inequities in the health of women, children, and adolescents, including identifying who is being left behind and why
- ii. Promote the identification and analysis of supply-side bottlenecks and demand-side barriers to effective universal access and coverage of health
- iii. Ensure the identification and promotion of practical solutions to reach those being left behind, addressing social inequities in health

The activities included in the workplan are interdepartmental, bringing together programs and work in PAHO's Departments of Family, Health Promotion and Life Course (FPL), including the Latin American Center for Perinatology, Women's and Reproductive Health (CLAP), Health Systems and Services (HSS) and Evidence and Intelligence for Action in Health (EIH).

## **Background**

The inter-agency movement Every Women, Every Child- Latin America and the Caribbean (EWEC-LAC) was formed with the shared leadership of eight international organizations to work towards the adaptation and implementation of the Global Strategy for Women's, Children's, and Adolescents' Health (2016- 2030) in Latin America and the Caribbean, through catalyzing and supporting countries in their efforts to deliver upon the targets and goals set forth in the Global Strategy.

As in previous years, in addition to USAID's support of EWEC-LAC, many of the other activities included in the health inequities workplan during Year 6 were focused around two of the central objectives of the Global Strategy for Women's, Children and Adolescent's Health, including **Survive** (End Preventable Deaths) and **Thrive** (Ensure Health and Well-Being).

The COVID-19 pandemic had a detrimental impact on both maternal and neonatal health in the region, both directly and indirectly via the disruption of health services. In 2020, there was a marked increase in maternal mortality reported by almost all the countries of the region. By the beginning of 2022, reported maternal mortality rates had decreased back down to pre-pandemic (2019) levels, however rates remain high enough that it is foreseen that the region is not on track to meet the global and regional goals commitments in terms of reducing maternal deaths.

Within the area of newborn health, key activities supported during Year 6 were selected to address the burden of disease, disability, and mortality due to preventable causes such as adverse perinatal outcomes, birth defects, sepsis, and asphyxia, with an overarching focus on persistent inequities. In LAC, preterm birth is a prevalent condition, and these newborns are at high risk of adverse outcomes. Caring for this vulnerable population and supporting the quality of care of newborns in the context of universal health coverage remained a high priority again this year.

The Strategy for Universal Access to Health and Universal Health Coverage adopted by PAHO Member States in 2014, as well as the Strategy for Building Resilient Health Systems and Post-COVID-19 Pandemic Recovery to Sustain and Protect Public Health Gains, adopted in 2022, emphasize the need to transform health systems based on a primary health care (PHC) approach. The former resolution encourages Member States to renew their commitment to implement the recommendations of the High-Level Commission on "Universal Health in the 21st Century: 40 Years of Alma-Ata" and the Compact 30-30-30 PHC for Universal Health, which calls for a reduction in access barriers by 2030. A fundamental first step towards the effective elimination of access barriers for all populations involves identifying which aspects of the health system and the population act as obstacles and facilitators for timely access, and thus must be prioritized in the formulation and execution of policies.

Considering this need, PAHO's Monitoring Framework for Universal Health has been used to track progress towards universal health, including the use of mixed methods and measures of access barriers, while the renewed Essential Public Health Functions (EPHFs) approach has reinforced the need for a comprehensive analysis of barriers to access, and stronger public health capacities, including those needed to assess, monitor, and evaluate the health system's response to the needs of the population. Through the health inequities workplan and guided by Member States' mandates, PAHO has provided technical assistance on the use of mixed method approaches to understand access barriers to health services and to facilitate policy dialogues for the identification of strategies and actions that respond to these challenges.

Finally, at times when the world is facing a critical shortage of health workers, a situation further aggravated by the pandemic, policymakers are looking for innovative strategies to develop programs that optimize knowledge, skills, and resilience among the global health workforces. In its Regional Strategy on Human Resources for Health (2018-2023), the Pan American Health Organization (PAHO/WHO) highlights that such health workforce crisis could have disastrous implications for the health and well-being of millions of people in the Americas. In addition, there is a recurrent disconnect between the health and education sectors that results in a mismatch between supply of health and social care workers and the health care needs of the population. As the COVID-19 pandemic demonstrated, this situation is particularly challenging at the first level of care in underserved areas with vulnerable populations and is a major contributing factor to social inequities in health.

During the sixth year of the grant, some of the **main achievements** that stand out as part of work to eliminate social inequities in health include:

- The report *No Time to Lose. Health Challenges for Adolescents in Latin America and the Caribbean* was presented in September 2022 during the [PMNCH accountability breakfast](#) and can be accessed via: <https://iris.paho.org/handle/10665.2/56441>
- The report on *Health Inequalities in Latin America and the Caribbean: A Sustainable Development Goal baseline assessment for women, children, and adolescents* was launched in July 2022. <https://www.youtube.com/watch?v=hjQKkIF3tT4> and <https://iris.paho.org/handle/10665.2/56123>
- An original commentary article in English was published by the International Journal for Equity in Health entitled “The Every Woman Every Child Initiative: Supporting Countries in Latin America and the Caribbean to Reduce Social Inequalities in Health”. <https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-022-01682-9>
- In 10 months, the virtual course on Respectful Maternity and Newborn Care (RMNC) has become one of the most visited courses on the PAHO Virtual Campus for Public Health. Approximately 30,463 people from 100 countries around the world have enrolled in the course, illustrating the interest the course has generated in professionals across the region.
- In August 2022, the government of Peru presented the document “Technical Standard for the Epidemiological Surveillance of Extreme Maternal Morbidity”. Fifty-four hospitals in 24 departments nationwide were selected to participate in the surveillance program, and health care personnel were trained to report Maternal Near Miss cases. Surveillance has now begun, and case reports have started to come in. These advances were supported and supervised by Peru’s government through its epidemiological surveillance office.
- For the first time, users of the Perinatal Information System (SIP) from PAHO/CLAP can access a one-click report that allows them to analyze Maternal Near Miss cases from an inequity perspective. The report presents absolute and relative inequity indicators, while presenting graphs in Equiplot format, to facilitate the interpretation of results.
- In neonatal health, the main achievement, both at the regional and country level has been sustaining advocacy efforts that highlight the importance of providing care to every newborn and especially to those who are born small and sick. Policy makers and health care providers have recognized the need for assessing conditions related to adverse outcomes, updating national plans and programs, and reinforcing training related to key interventions, such as newborn asphyxia, the prevention and treatment of newborn sepsis and infections, improving quality of care, kangaroo care, etc. These achievements represent the cumulative effect of activities initiated during year 4 and that continued during year 5 and 6, supporting the relevance of planning activities that contribute on building capacity. Additionally, from the regional



perspective, a main achievement has been incorporating parents; and families' perspective in the newborn care discussion.

- Regional access barriers assessments were showcased in two important documents, including WHO's [Tracking Universal Health Coverage: 2021 Global monitoring report](#), and PAHO's brochure on [Building Resilient Health Systems to Advance toward Universal Health in the Americas: Lessons from COVID-19](#).
- Three additional manuscripts on access barriers have been drafted. These include one article for a Special Edition on Rural Proofing for the Rural and Remote Health Journal: Identifying access barriers faced by rural and dispersed communities to better address their needs: implications and lessons learnt for rural proofing for health in the Americas and beyond. Preliminary results were showcased in WHO's global community in PHC. The other two drafted articles include recommendations and lessons learned from implementation of access barriers studies and their findings.
- A first draft of the regional report "Universal Health in the Americas: Towards a Better Understanding and Addressing the Access Barriers Faced by Vulnerable Populations" has been internally approved, and the development process is on track and programmed for 2022.
- A scoping review on barriers due to regulation and accreditation among health professions in the region of the Americas has been completed and it will be added to the package of products generated under strategic line III of the workplan, together with the final report on barriers related to the implementation of socially accountable health education institutions.
- The self-directed MOOC courses on social accountability of health professions education and interprofessional health education have been finalized and are available in English at PAHO's Virtual Campus of Public Health. Completion of an extra module on the impact of the COVID-19 pandemic and emerging tendencies in the education of health professionals is also advancing. In addition, adaptations of the course on social accountability into Spanish and Portuguese have been initiated.
- The proposals for two regional publications entitled "The Indicators for Social Accountability Tool in Medical Education" and "PAHO/WHO Regional Guidelines to support the Advancement of Interprofessional Education and Collaborative Practice in the Americas" have been internally approved, and the official publication process is on track.
- During Year 6, numerous regional and global webinars were held to disseminate the products developed under the area of social accountability in the education of health professionals, together with lessons learned and recommendations. A concept note was circulated among health authorities and key stakeholders. The webinars were freely available and broadcasted globally, with participation of experts from the Americas and other parts of the world, to facilitate dissemination and exchange of experiences in this field. In all cases, the support from USAID was acknowledged.
- In addition, PAHO has continued to pilot, disseminate, and share the products generated during previous years. The focus has been mainly on collaborations with international, regional, and subregional institutions dedicated to health professions education -each of them representing multiple countries of the Americas- and participation in multiple virtual webinars and meetings. Some selected examples are: WFME-World Federation of Medical Education, PAFAMS-Pan American Federation of Associations of Medical Schools, ALAFEM-Latin American Association of Medical Schools, ORAS-CONHU-Andean Health Federation, COMISCA-Central America Health Federation, AFMC-Association of Faculties of Medicine of Canada, The Network TUFH (Towards Unity for Health), ISAATT (International Social Accountability and Accreditation Think Tank) and ASPPH (Association of Schools and Programs of Public Health)
- [The ISAT Instrument - Indicators for Social Accountability Tool](#) -developed under this grant- continues with its global expansion. A new set of 50 medical schools around the world, including 20 representing academic institutions in the Americas, have been identified and will be applying the instrument. A dedicated website has been developed to facilitate the application of the tool among the participating

institutions and to enable future research activities. The platform is now also available in English, Spanish and Portuguese and will be fully functional in 2023.

USAID's support during this reporting period achieved the following **key activities and deliverables**:

- An evaluation of EWEC-LAC was conducted, discussed and the final report was finalized, which contains specific agreements to be implemented starting in October 2022.
- PSIWG organized a workshop in Panama with the participation of 11 countries from the region. The workshop was aimed to i) Share experiences and lessons learned from the countries' work and interventions focused on reducing inequities. ii) Strengthen the capacity of countries to apply equity-based approaches to improve the health and well-being of women, girls, boys, and adolescents, particularly those living in situations of vulnerability; and iii) Strengthen the capacity of countries to apply an equity-based approach in their efforts to reduce unplanned teenage pregnancies - in follow-up to the EREFA study. During the workshop the main products developed by PSIWG were discussed and analyzed with the participating country representatives; lines of work with key actions and technical assistance were identified and countries identified ways to implement the main recommendations from the EREFA study.
- The following documents developed by PSIWG were finalized and are waiting for the final step for publication: i. *Good Practices that Promote Health Equity for Women, Children and Adolescents in Latin America and the Caribbean*; ii. *A compendium of tools, instruments, and methods to identify and address social inequities affecting the health and wellbeing of women, children and adolescents in Latin America and the Caribbean*; iii. *Fecundidad y Maternidad Precoz: Tendencias y Estado de Situación en América Latina y el Caribe* (Fertility and Early Motherhood: Trends and the Current Situation in Latin America and the Caribbean)
- A draft of the publication *Pregnancy reduction and prevention in girls under 15 years of age in Latin America and the Caribbean* was completed. This document was discussed and reviewed with subject matter experts and their recommendations are being incorporated.
- Technical assistance was provided to select countries to apply tools developed by EWEC-LAC aimed at reducing social inequalities in health, including: 1. a framework of measurement for the social inequalities in health; 2. guidelines for approaching social inequalities in health through the creation of evidence based policies and plans, 3. tools for promoting data including a dashboard of data to visualize the trends in inequalities in health, and 4. methodologies for the measurement and monitoring of inequalities and the establishment of goals to reduce inequalities in health.
- A concept note was sent to countries in the region entitled: *Support from EWEC-LAC on National Strategies or Plans for Health in Latin American and Caribbean Countries aimed to develop technical capacities in the analysis of social inequalities in health*. Various countries have subsequently requested technical assistance in this area.
- An additional set of indicators was developed to measure inequalities in the subset of pregnant women who experience Maternal Near Miss. Any SIP plus database that contains data on the required variables can generate the following indicators of absolute and relative inequality, including:
  - 1) Risk ratio index,
  - 2) Disparity index and
  - 3) Deviation rate between groups

These indicators can be obtained automatically by clicking on the button "Health inequities for cases of maternal near miss" and disaggregated according to maternal age, ethnicity or by place of residence. In

addition to the traditional tables of Maternal Near Miss indicators, a report is displayed that contains equity tables and graphs (Equiplot) to aid in data interpretation.

- To strengthen the capacities of teams to audit maternal deaths and cases of severe maternal morbidity at the local or national committee level, the *PAHO Technical Recommendations for Auditing Cases of Extreme Maternal Morbidity and Developing Appropriate Responses to Reduce It* was developed. These recommendations were incorporated into the tutored virtual course for the auditing of Maternal Near Miss cases, which was validated in the Dominican Republic, Paraguay, and Peru.
- Of the three countries that received direct technical cooperation to develop national Maternal Near Miss surveillance systems, the Dominican Republic and Peru already have their national systems up and running, while Paraguay has started by setting up a sentinel center for surveillance.
- To advocate and strengthen newborn care, quality and person centered, and to prevent adverse neonatal outcomes and disability, in Year 6 priority was given to strengthening the role, knowledge and skills in families and health care providers. The mobile App eCBB/PAHO, was developed and launched this year and includes specific content on caring for healthy, small, and sick newborns.
- Virtual meetings and a qualitative analysis aimed at consolidating experiences with newborn care from the perspective of families and support groups were also coordinated this year. Additionally, the communicational campaign called “28 Days, Time to Care and Love” was oriented to raise awareness regarding the importance of newborn care and to provide relevant and evidence-based information. The campaign involved testimonies from families about the importance of newborn care, its challenges, and the importance of providing family-centered care by health services were presented.
- A policy brief aimed at strengthening policies aimed at newborns and a matrix to support countries in establishing a baseline on health policies and interventions in newborn health were developed and launched. (The final document is under design).
- Two online courses were designed and developed, aimed at improving newborn care in facilities: “*Lineamientos para el seguimiento de recién nacidos prematuros, pequeños y gravemente enfermos*” and “*Calidad de cuidado de salud a recién nacidos y condiciones esenciales*”. They are under the final process to be uploaded onto PAHO’s Virtual Campus for Public Health.
- Lessons learned from previous years on perinatal death review were consolidated and presented in a regional webinar and in technical cooperation activities in Bolivia, Peru, and Guatemala. A technical document was prepared: “*Assessment of implementation of audit review recommendations to reduce Near Miss cases, Stillbirths, and Maternal and Neonatal deaths: experiences from the Eastern Caribbean*”.
- A set of indicators and a tool to assess structural and procedural aspects related to preventing newborn sepsis in health facilities was also designed and tested.
- In Year 6, PAHO’s Monitoring Framework for Universal Health was implemented in 13 countries, exceeding the target of 3 countries set in 2021. PAHO worked with health policy experts, ministry of health managers, health personnel, academia, and representatives of civil society from Colombia, Dominican Republic, Guyana, Honduras, and Peru to identify and prioritize strategies for acting on barriers facing vulnerable communities, including issues related to gender and autonomy, ethnicity, cultural beliefs, knowledge, health promotion, financial accessibility, quality and continuity of care, rurality, and organizational issues. Those activities have supported national efforts toward reducing access barriers and strengthening health systems towards equitable, comprehensive, and inclusive health care models based on PHC. In addition, the assessments have resulted in recommendations and lessons learned that could guide the incorporation of mixed approaches to assess access barriers in national and local monitoring and evaluation systems. These exercises demonstrated the feasibility of using mixed approaches to understand the magnitude and complexity of different access problems

faced by diverse population groups at both the national and subnational levels, as well as the context and underlying factors related to the implementation of policy initiatives.

- PAHO has also made progress in conducting two additional access barriers analyses. A new implementing academic partner was contracted to support access barriers to integrated and intercultural services in rural areas of Chachapoyas and Raimondi districts of Peru, while a comparative study on access barriers related to implementation of benefits packages in Colombia and Dominican Republic is being conducted. While these assessments are in their initial stages, it is expected that the policy dialogues that result from the process will serve to address access barriers and health systems bottlenecks hindering progress toward the implementation of PHC-based models of care in those countries.
- The COVID-19 pandemic aggravated a preexisting critical shortage of health workers. There is also a recurrent disconnect in the region between the health and education sectors that results in a mismatch between supply of health and social care workers and the health care needs of the population. This situation is particularly challenging at the first level of care for populations living in situations of vulnerability and is a major contributing factor to social inequities in health. During Year 6, activities centered on piloting, disseminating, and sharing the products generated during previous years via more than 50 virtual webinars with international, regional, and subregional institutions dedicated to health professions' education. These efforts have also facilitated the establishment of a global consortium of medical schools that is promoting the use of the ISAT Instrument. During the piloting phase 30 medical schools around the world participated, including 10 representing academic institutions in the Americas. A new set of 50 medical schools around the world, including 20 representing academic institutions in the Americas, have been identified and will be applying the instrument in 2023. Results from this initiative have been presented at national and international meetings.

The following **lessons learned**, and **challenges** were observed in the reporting period:

- The development of virtual activities continues to be extremely useful and contributes to advancing public health agendas. Virtual activities often allow for a more efficient use of resources and increase the number of professionals who can benefit.
- The self-administered course modality has made training accessible to tens of thousands of professionals. Having added to all our self-administered virtual courses the possibility of accessing them off-line reduced the existing equity gaps between those professionals who have better connectivity, and those who are in places with worse connectivity.
- Although it has been mentioned in prior reports, it is necessary to reiterate the low priority that the governments of the region are giving to maternal health. This lack of prioritization translates into the provision of fewer financial, material, and human resources that have an impact on the slow decline in maternal mortality.
- In newborn health, the inclusion of the perspective of civil society and parents has been particularly relevant. Another positive experience and lesson learned is related to the use of technologies and innovative approaches. The use of eLearning has already expanded, and, under this project, it was possible to contribute with specific topics on newborn health. The design and launch of the eCBB/PAHO mobile App has also been a highly valued contribution.
- The principal challenges to the implementation of access barriers assessments were the countries' COVID-19 response, which directed resources and attention from the ministries of health, as well as changes in national authorities, which caused the postponement of activities in some participating countries. Considering these challenges, workplans were adapted to meet the needs in the different contexts. Another important challenge is that countries face important gaps in their capacity to

institutionalize and strengthen monitoring and evaluation activities, as well as to improve the availability of data necessary to measure and analyze progress toward universal health, including the use of access barriers metrics in a continuous and standardized manner. To address this, PAHO will continue to adapt Universal Health monitoring and evaluation tools to the local context and triangulate across multiple available data sources. Moreover, the program description for the 2022-2027 USAID/PAHO agreement will focus on supporting Member States to assess institutional capacities needed to execute public health functions related to monitoring and evaluation of universal access to health and universal health coverage, including the existence of normative frameworks, coordination mechanisms, and financial and human resources for monitoring and evaluation.

- There are important lessons learned from the analyses conducted to assess and address barriers to access to health services, which could guide future monitoring and evaluation actions. First, these exercises demonstrated the feasibility of using mixed approaches to understand the magnitude and complexity of different access problems faced by diverse population groups at both the national and subnational levels, as well as the context and underlying factors related to the implementation of policy initiatives. Second, participation and involvement of health authorities promoted the use of the study findings through the collaborative construction of policy options for reducing and eliminating access barriers. Future experiences could explore the incorporation of mixed approaches to assess access barriers in national and local monitoring and evaluation systems.
- As mentioned in previous reports, perhaps the principal lesson learned during this period has been the practical demonstration of the power of purposeful “seed funding” by USAID at regional level and global multilateral collaboration to advance important global initiatives. For example, the ISAT Instrument, developed entirely with the support of this USAID grant and initially focused on several Latin American countries, is now benefiting a world-wide scenario to advance social accountability in the education of health professionals.

## Topic 7: Health Information Systems

The health sector of the Americas Region is aware of the significant opportunities and challenges that come with positioning public health in the age of digital interdependence. Countries of the Region unanimously endorsed two policies in 2021 to support the accelerated advancement towards the digital transformation of the health sector. These policies include:

- CD59/6 - Roadmap for the Digital Transformation of the Health Sector in the Region of the Americas, and
- CD59/7 - Policy on the Application of Data Science in Public Health Using Artificial Intelligence and Other Emerging Technologies.

With the collaboration of PAHO’s Department of Evidence and Intelligence for Action in Health (EIH) and support from USAID, countries are strengthening their capacity building and their implementation of digital health mechanisms. The path of transformation is full of new challenges, including developing and maintaining strong governance mechanisms for information systems for health (IS4H), establishing more agile mechanisms for data management, working with other sectors such as innovation and digital government, that are also interested in digital health, and keeping the health sector up to date with the last training opportunities on IS4H, digital health, data management, and related topics, among others.

The **main achievements** that stand out during the sixth year of the PAHO-USAID umbrella grant include:

- Support for countries in the development of their Roadmaps for Digital Transformation of the Health sector
- Acceleration of the Region's Digital Literacy process through data management, vital statistics, IS4H concepts and implementation knowledge.
- Renewed training approaches developed for digital literacy of the health sector, including Vital Statistics
- Facilitation of the development of informed policies, strategies, and plans through PAHO's Platform for Public Health (PLISA).

**Key activities and deliverables** that resulted in the main achievements described above include:

- As a result of technical cooperation activities to implement the recommendations of the IS4H Maturity Assessments emphasizing vital statistics in twelve countries, national roadmaps for the digital transformation of the health sector were addressed.
- As a result of the vital statistics approach to countries, an important MoU was signed with the nonprofit Vital Strategies with the aim of ensuring a more expanded collaboration on vital statistics. Assessment reports are currently in progress and are being discussed with national authorities.
- The work of the IS4H initiative was taken into consideration as part of PAHO's contribution to the Summit of the Americas
- In addition to direct technical cooperation activities, it is important to highlight that there have been more than 80,000 downloads of the IS4H tools and methodologies recorded on the PAHO's IS4H portal. All tools officially recognized the support of USAID.
- Based on the first ever region-wide analysis of open health data sets, PAHO's PLISA Platform was updated, and core indicators were published and presented at PAHO's 59th Directing Council. More than 240 indicators from all Member States are up to date on PAHO's PLISA Platform. Dashboards and additional information can be found here: <https://opendata.paho.org/en/core-indicators/core-indicators-dashboard>
- To address training and capacity building needs of the Region, a collaboration with WHO and digital health/information systems for health, PAHO/WHO collaborating centers were established to develop digital literacy materials and courses covering several topics, such as interoperability, telehealth, change management, digital health, among others. This collaboration includes the translation of material into PAHO's official languages.

During the reporting period the key **lessons learned, and challenges** included:

- Despite ongoing travel limitations and restrictions due to the COVID-19 pandemic, most planned activities were conducted according to the original workplan.
- The raised demand from countries for *in situ* technical cooperation requires PAHO to be prepared for a hybrid model to assist countries' needs.
- From a technical standpoint, as part of an after-action review conducted with a group of partners, experts, and representatives from the areas of information systems and digital health in the countries of the Americas, a big lesson learned was on how to engage the health sector within other initiatives like eGovernment or vice presidential digital focused initiatives.
- The growing demand for technical cooperation for the implementation of IS4H within the framework of the digital transformation of the health sector has generated a great offer of support from various international organizations and organizations. PAHO, in its role as a technical cooperation agency in

health, has the possibility of developing mechanisms with the objective of integrating this collaboration between partners.

## 2. Inter-programmatic Efforts

Most topics under the USAID Umbrella grant utilized an inter-programmatic approach-both within and outside of PAHO/WHO-to advance their objectives. A few examples of these efforts are highlighted below:

- Joint TB work with other PAHO programs to address vulnerable populations has been conducted mainly with the Equity, Gender, and Cultural Diversity (EGC), HIV/STI and hepatitis, non-communicable diseases and anti-microbial resistance units and programs, as well as with the PAHO Strategic Fund.
- Implementation of activities has been facilitated with the involvement of partners like the TB Parliamentary Caucus, civil society organizations and representatives, NGOs, academic and research institutions, scientific societies, TB supranational reference laboratories, PAHO/WHO collaborating centers, PAHO's TB technical advisory groups, subregional integration mechanism (ORAS-CONHU and SE-COMISCA), and the Global Fund.
- The microstratification of malaria and the implementation of DTI-R are topics that have been especially supported by this agreement that promote an inter-programmatic approach at the local level. PAHO has also been promoting the organization of local teams to coordinate malaria interventions. The approach encourages the integration of malaria structures with the local health services teams and epidemiology staff. This local malaria management approach could contribute to transversally organized surveillance or response to other events, particularly in hard-to-reach populations.
- Inter-programmatic approaches were also promoted in three other topics within the malaria workplan: i) malaria information systems; ii) radical cure policies; and iii) chemoprevention strategies. In the three topics, proposals were developed to create "functional groups" at the country level, integrating several disciplines and areas from the ministries of health in an inter-programmatic agenda that includes regulatory, research, surveillance, and operational aspects.
- The framework proposed for the Guiana Shield countries is another example of an inter-programmatic approach. The framework proposed by PAHO emphasizes the need to work with communities and the mining industry and incorporate elements of social disciplines such as the people-centered approach supported by USAID with Breakthrough ACTION in Guyana.
- A regional consortium of agencies was established to coordinate the improvement of CRVS and ICD-11 implementation with the participation of UNICEF, UNFPA, CDC domestic, CDC Foundation, World Bank, IDB, Vital Strategies, PAHO, WHO, Global Health Advocacy Incubator.
- The report on Inequalities in Health in Latin America and the Caribbean has generated a lot of interest across the region and internal collaboration has taken place with between FPL (EWEC-LAC) and PAHO's Unit of Health Analysis, Metrics and Evidence, with a focus on how to integrate equity into interventions in practice
- CLAP, EWEC-LAC (FPL) and EIH all contributed to the design of aspects related to inequity in Maternal Near Miss surveillance.
- PAHO continues to be an active member of the Interinstitutional Working Group for the Reduction of Maternal Mortality (GTR for its acronym in Spanish) and PAHO has shared its work with partners to reduce maternal death through strategies designed to improve the surveillance of Maternal Near Miss, among other actions.
- In conjunction with the Collaborating Center of the School of Midwives of the University of Chile (WHOCC CHI-18) PAHO has followed up on the evolution of the training in Competency-Based Education promoted in the initial years of the USAID/PAHO agreement.
- PAHO's strengthened strategic alliances with ECLAC resulted in a second ECLAC/PAHO report "The prolonged health crisis and its impact on health, the economy, and social development" launched on 14

October 2021. This work reinforces the inextricable linkages between health, social development, and the economy, and provides an analysis of pandemic scenarios for the Region for the following 6 - 9 months. Key recommendations across health, the economy, labor, and social protection were provided to countries, with follow-up advocacy ongoing with countries and partner organizations.

- The HSS Department, in collaboration with PAHO's EGC unit and the Regional Directorate of Health Amazonas, published the report "Barriers and policy options for access to mental health services for adolescents and youth of indigenous peoples in the province of Condorcanqui, Amazonas, Peru 2021" (in Spanish).
- HSS also collaborated with EGC to publish a peer-reviewed article in the Pan American Journal of Public Health on barriers to access health services for women and children in Latin America. This peer-reviewed article will support PAHO's efforts to share knowledge related to the health access barriers analysis methodology and strengthen gender-based analysis.
- The call for stronger relationships between health systems and health professions education to improve population health status and to achieve Universal Health is not new. Over the years, several national and international initiatives have promoted ways to foster synergy among key health bodies to close the gap between the education of health professionals and relevant response to priority health needs. Health sciences academic institutions are key stakeholders with strong potential to mobilize forces toward improved health outcomes in priority areas (i.e., TB, malaria, NID, RMNCAH) and to address the impact of the social determinants of health. In addition, they can help reduce health disparity through a fairer distribution of health workforce in underserved areas and supporting effective health-care models based on primary health care.
- Aware of the important connections between the USAID umbrella grant and the support that PAHO provides to the countries, a strengthened cooperation with IDB, WB, WHO, UNICEF and UNDP have developed to implement the IS4H framework in most countries of the Region.



### 3. Progress toward Grant Outcome Indicators

The table below includes the identified outcomes, related indicators, and baseline and target information established for the grant and provides a summary of the progress obtained as of the end of Year 6 (September 2022).

Topic	Indicators <sup>1</sup>			
	Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2022	Proposed annual target FY2021	Results as of September 2022 and Comments
1 TB	<b>TB treatment coverage.</b> Number of new and relapse cases that were notified and treated, divided by the estimated number of incident TB cases in the same year, expressed as a percentage. <b>Baseline:</b> 81%	≥90%	2% increase	69 % <sup>2</sup>
	<b>Documentation of HIV status among TB patients.</b> Number of new and relapse TB patients with documented HIV status divided by the number of new and relapse TB patients notified in the same year, expressed as a percentage. <b>Baseline:</b> 74%	≥95%	4% increase	80% <sup>2</sup>
	<b>Number of international policies, guidelines, and research studies</b> in TB diagnosis, treatment, and prevention published with support from USAID <sup>3</sup> . <b>Baseline:</b> N/A	10	2	6: Guidelines: translation of WHO consolidated guidelines on TB prevention, screening, diagnosis, treatment (drug-susceptible and resistant TB), and on the management of TB in children and adolescents.
	<b>Number of countries introducing TB diagnosis and treatment interventions</b> with USAID support <sup>4</sup> . <b>Baseline:</b> N/A	N/A	N/A	3 (Colombia, Ecuador, Dominican Republic) Technical support provided for the implementation of the ShORRT operational research package (Short, all-Oral Regimens for Rifampicin-resistant Tuberculosis) to evaluate

<sup>1</sup> Across all indicators, PAHO used other sources of funding for those countries that are listed that are ineligible to be supported by USAID resources.

<sup>2</sup> \* As of Dec. 2021 (available data) impacted by the COVID-19 pandemic.

<sup>3</sup> This indicator is requested by USAID to be reported on annually. It is defined as the total number of international policies, guidelines and research studies related to TB diagnosis, treatment and prevention that include input from TB experts at USAID and/or for which technical assistance needed to develop the product was funded by USAID. These products include, but are not limited to, WHO guidelines on TB services, peer-reviewed research articles published on studies for which USAID funded or technical assistance was provided, policy documents developed by WHO to support adoption of TB related interventions.

<sup>4</sup> This indicator is requested by USAID to be reported on annually. It is defined as the total number of countries who introduced a new TB diagnosis or treatment intervention with support from a USAID core-funded effort. For example, this can include new technologies to support TB diagnosis or new TB treatment regimens.

					the effectiveness and safety of modified shorter all-oral regimens for MDR/RR-TB patients.
--	--	--	--	--	--

Topic		Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2022	Proposed annual target FY2021	Results as of September 2022 and Comments
2	Malaria	Percent reduction in malaria morbidity compared with 2015 official figures <b>Baseline: 451,244</b>	≥40%	16% reduction	In 2021 the Region reported a total of approx. 490,000 cases (data still being reviewed to report in the WMR 2022), a 7% increase since 2015 (GTS baseline), but a 36% reduction in relation to 2017, the year with the highest number of cases since 2015. The regional variation is largely affected by changes in the malaria situation in Venezuela. By 2021, 9 countries achieved the 40% reduction expected for 2020 and 3 countries already achieved the 2025 target of 75% reduction, including Belize that completed 3 years without indigenous cases. There was an increase by more than 30% in relation to 2015 in 7 countries, with Nicaragua, Panama, Costa Rica, Guyana, and Ecuador being the countries with the highest increase in transmission in relation to 2015.
		Number of malaria-endemic countries with no stock-outs of key anti-malarials at the national level in a given year <sup>5</sup> <b>Baseline: 19 countries</b>	21 countries <sup>6</sup>	21 countries <sup>6</sup>	20 malaria-endemic countries had no stock-outs. 7 countries experienced risk of stock-outs of antimalarials. The situation was mitigated with the support of the PAHO CDE/VT regional warehouse. Unfortunately, there is a

<sup>5</sup> PRY, ARG, and SLV included as baseline for endemic countries in 2015, these three countries were certified malaria-free in 2018, 2019, and 2021 respectively.

<sup>6</sup> From the 21 endemic countries PAHO will support five-four countries (ARG, ~~BOL~~, FGUI, PRY, and VEN) because these countries cannot benefit from USAID funds.

					shortage of active product ingredient (API) for primaquine 15 mg production, and currently 1 country has no stock. The problem was detected in mid-September 2022 and PAHO is currently supporting the country with the procurement process to resolve the issue as soon as production is available.
		Number of countries implementing strategies to address malaria among populations in situations of vulnerability <b>Baseline:</b> 10 countries	18 countries <sup>7</sup>	12 countries	All 18 malaria endemic countries developed actions to address malaria in indigenous populations, migrant workers, miners, and other populations in situations of vulnerability. Four of these countries are not supported by the USAID agreement and receive financial support from other sources.
		Number of artemisinin-based combination therapy (ACT) treatments purchased with USG funds <b>Baseline:</b> N/A	N/A <sup>8</sup>	N/A	No ACT treatments purchased during Year 6. Only 30,000 treatments of CHLOROQUINE PHOSPHATE 250MG purchased and will be delivered to the CDE/VT Regional Warehouse in October 2022.
		Number of malaria rapid diagnostic tests (RDTs) purchased with USG funds <b>Baseline:</b> N/A	N/A	N/A	507 kits of Bioline Malaria AG P.F/P.V. Rapid Test Kits purchased (25 tests/kit), for a total of 12,675 RDTs.

<sup>7</sup> ARG, PRY and HTI are excluded from this indicator

<sup>8</sup> These commodities will be purchased to prevent country stock outs, as well as for emergencies, and to treat travelers coming from areas where chloroquine resistance is known. These commodities will be managed from PAHO's regional warehouse.

Topic		Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2022	Proposed annual target FY2021	Results as of September 2022 and Comments
3	Neglected Infectious Diseases	Number of endemic countries and territories implementing a national or subnational plan, program, or strategy to reduce the burden of priority NIDs according to their epidemiological status, in line with the WHO Roadmap to Reduce the Burden of Neglected Tropical Diseases (Accelerating Work to Overcome the Global Impact of Neglected Tropical Diseases: A Roadmap for Implementation) <b>Baseline:</b> 9 countries	15 countries	15 countries	Brazil, Bolivia, Colombia, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Paraguay, Peru, Saint Lucia, and Venezuela are implementing national plans, strategies or interventions to eliminate or control at least one NID.
		Number of NID-endemic countries that have achieved the goals of elimination of one or more NID and have developed and put in place measures to prevent disease resurgence or reintroduction of onchocerciasis, lymphatic filariasis and blinding trachoma.  <i>For onchocerciasis:</i> <b>Baseline:</b> 3 countries <i>For lymphatic filariasis:</i> <b>Baseline:</b> 3 countries <i>For blinding trachoma:</i> <b>Baseline:</b> 0	Oncho: 6 countries  LF: 6 countries  Trachoma: 4 countries	Oncho: 2 countries  LF: 1 country  Trachoma: 1 country	<b>Onchocerciasis:</b> elimination was verified by WHO in Guatemala in 2016, increasing the number of countries where onchocerciasis has been eliminated from 3 to 4. Active transmission remains in Brazil and Venezuela (Yanomami Focus Area). <b>Lymphatic filariasis:</b> Considerable progress has been made towards the elimination of LF as a public health problem in Guyana, where pre-IDA impact surveys were carried out in 2021 and IDA impact surveys will be carried out in the first quarter of 2023. The COVID-19 pandemic made it necessary to delay some interventions as well as TAS studies in Brazil and Dominican Republic. Elimination of LF may be validated in Brazil in 2023 and in Dominican Republic in 2025 if the postponed activities can be resumed in 2023. <b>Trachoma:</b> Validation surveys, planned initially to be conducted in Guatemala in 2020, could not be carried out in 2022. If they are carried out in 2023 and the results are as expected, in 2023 or in 2024 Guatemala could be the second

					country in the Region to validate the elimination of trachoma as a public health problem, after Mexico, validated in 2017.
--	--	--	--	--	--

Topic		Indicators				
		<i>Note: This section has been updated to reflect the integrated workplan that was revised in 2019 and the new organization of the indicators</i>				
		Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2022	Proposed annual target FY2021	Results as of September 2022 and Comments	Related activity in Excel workplan
4-6, 8 (Originally)	Inequities	Number of lead midwifery/nursing teachers trained in CBE framework <b>Baseline: TBD</b>	NA	NA	NA	Section III #6
		Number of new professionals (universities, midwives, MoH) trained in evaluation models) <b>Baseline: 0</b>	1,000	900 (2021 target was 100 professionals.) <sup>9</sup>	4,892 (The projected goal was exceeded more than 4 times. The training available in Spanish, English and French was carried out by professionals from 80 countries around the world)	Section III #6
		Number of countries where MCPS Manual 2nd edition is adopted as an educational instrument <b>Baseline: 0</b>	16	3 (13 countries as of 2021)	12 (Even though this indicator was removed from the project for programming reasons a few years ago, ARG, COL, DOM, ECU, GTM, LCA, MEX, PAN, PER, PRY, TTO, and VCT, have fulfilled this indicator.	Section III #6
		Number of countries that received support to develop a national system for the surveillance of Maternal Near Miss (NEW) <b>Baseline: 0</b>	3	3	6 (DOM, PAN, PER, PRY, TTO and URY)	

<sup>9</sup> Course is now virtual on VCPH and therefore has a wider reach.

	N° of countries with updated goals on newborn and fetal mortality in alignment with Every Woman, Every Child, Every Adolescent global strategy and Every Newborn Action Plan (ENAP) <b>Baseline: 3</b>	12	4 (8 countries as of 2021)	16 countries (based on the Plan of Action for Women's, Children's, and Adolescents' Health 2018-2030)	Section I #1
	N° of countries collecting quality data on fetal and newborn health <b>Baseline: 12</b>	18	1 (17 countries as of 2021)	19 countries reporting data on fetal and newborn health	Section I #3
	Number of countries that have received national and local sensitization trainings on the underlying concepts and principles of health equity in the context of LAC. <b>Baseline: 7 countries</b>	8 countries (COMISCA)	1	Results pending	Section III #13 and #14
	Number of countries who have developed and/or implemented national plans to incorporate equity-based approaches into existing national and local health efforts <b>Baseline: 0 countries</b>	6 countries (BOL, COL, DOR, ECU, PER, VEN)		All countries are making efforts to incorporate equity-based approaches, in particular DOR that is developing a dashboard.	Section III #13 and #14
	Number of countries that have received national and local trainings in the analysis of data in order to measure health inequalities <b>Baseline: 10 countries</b>	COMISCA (8), ORAS CONHU		BOL, PRY, PER, GUT, SLV, HON, NIC, CRI, PAN, BLZ, DOR were trained in the analysis of data during the meeting in Panama City in August 2022	Section 1 #7
	Number of countries who have developed and/or implemented national plans of action to incorporate health inequality measurement and monitoring into existing national and local health information systems <b>Baseline: 0 countries</b>	15 countries	15 countries	DOR, CHL, ECU, COL	Section III #13 and #14
	Number of countries and territories that have analyzed and reported progress toward universal access to health and universal health coverage using the framework for monitoring and evaluation <b>Baseline: 4</b>	18	3 (15 countries as of 2021)	PAHO's Monitoring Framework for Universal Health was implemented in 13 individual countries between October 2021 and September 2022, exceeding the target of 3 additional countries set in 2021. First, the Framework was used to guide access barriers assessments in Colombia, Dominican Republic,	Section I #6, Section II #5, Section III #9

						<p>Guyana, Honduras, and Peru. Second, the Framework was applied during phase 1 of the Essential Public Health Function national assessments in 7 countries: Bahamas, Bolivia, Costa Rica, Dominican Republic, El Salvador, Peru, and Suriname. Finally, the Framework was aligned with WHO's tools for evaluating the capacity of first line services and community needs and barriers during the COVID-19 pandemic, and was implemented in 5 countries: Suriname, Peru, Paraguay, Saint Lucia, and St Kitts and Nevis.</p>	
		<p>Countries enabled to develop and implement human resources for health (HRH) policies and/or plans to achieve universal access to health and universal health coverage  <b>Baseline: 11</b></p>	20	2 (18 countries as of 2021)	<p>22 countries</p> <p>Seven countries have reported that they have a policy on human resources that is formalized and in the process of implementation. An additional 15 countries have reported that they have been enabled to develop HRH policies &amp; plans (and consider this indicator as a target for the final evaluation of PAHO's HRH Plan of Action 2018-2023)</p>	<p>Section II #6, Section III #10, #11</p>	

Topic		Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2022	Proposed annual target FY2021	Results as of September 2022 and Comments
7	Health Information Systems	Number of countries that actively participate in the Latin American and Caribbean Network for Strengthening Health Information Systems (RELAC SIS) <b>Baseline:</b> 13 countries (2016)	32	3 additional countries (from 29 to 32)	Achieved (as of YR5) All countries and territories in the Americas are actively participating in the RELAC SIS Network, which has since been expanded to incorporate IS4H and digital health topics.
		Number of countries that have conducted a recent national assessment of their information systems for health <b>Baseline:</b> 0	49	20 additional countries (from 29 to 49)	Achieved (as of YR5) PAHO has now conducted IS4H assessments on 49 countries, some of them are under countries' internal validation processes.



## 4. Products Developed during Current Project Period

The products that were developed through the support of the PAHO-USAID grant and linked to key deliverables during the reporting period are included below. When possible, links to the product are included or [they can be accessed via an electronic folder](#). Otherwise, materials are also available upon request.

### ***Tuberculosis-related products:***

- Regional TB Report 2020 (English version):  
[https://iris.paho.org/bitstream/handle/10665.2/55194/9789275124475\\_eng.pdf?sequence=4&isAllowed=y](https://iris.paho.org/bitstream/handle/10665.2/55194/9789275124475_eng.pdf?sequence=4&isAllowed=y)
- Regional TB Report 2020 (Spanish version):  
[https://iris.paho.org/bitstream/handle/10665.2/55047/9789275324479\\_spa.pdf?sequence=4&isAllowed=y](https://iris.paho.org/bitstream/handle/10665.2/55047/9789275324479_spa.pdf?sequence=4&isAllowed=y)
- World TB Day 2022 commemoration materials and video (English translation):  
<https://www.paho.org/en/campaigns/world-tuberculosis-day-2022>

### Translation of documents into Spanish:

- Handbook for the use of digital technologies to support tuberculosis medication adherence  
[https://iris.paho.org/bitstream/handle/10665.2/55815/9789275325063\\_spa.pdf?sequence=1&isAllowed=y](https://iris.paho.org/bitstream/handle/10665.2/55815/9789275325063_spa.pdf?sequence=1&isAllowed=y)
- Treatment of drug-susceptible tuberculosis: rapid communication  
[https://iris.paho.org/bitstream/handle/10665.2/55884/9789275325360\\_spa.pdf?sequence=1&isAllowed=y](https://iris.paho.org/bitstream/handle/10665.2/55884/9789275325360_spa.pdf?sequence=1&isAllowed=y)
- Rapid communication: Key changes to the treatment of drug-resistant tuberculosis:  
<https://iris.paho.org/handle/10665.2/56438>
- WHO consolidated guidelines on tuberculosis. Module 1: TB prevention treatment  
[https://iris.paho.org/bitstream/handle/10665.2/55801/9789275323144\\_spa.pdf?sequence=1&isAllowed=y](https://iris.paho.org/bitstream/handle/10665.2/55801/9789275323144_spa.pdf?sequence=1&isAllowed=y)
- WHO operational handbook on tuberculosis Module 1: TB prevention treatment  
[https://iris.paho.org/bitstream/handle/10665.2/55970/9789275325100\\_spa.pdf?sequence=1&isAllowed=y](https://iris.paho.org/bitstream/handle/10665.2/55970/9789275325100_spa.pdf?sequence=1&isAllowed=y)
- WHO consolidated guidelines on tuberculosis. Module 3: diagnosis  
<https://iris.paho.org/handle/10665.2/55926>
- WHO operational handbook on tuberculosis. Module 3: diagnosis  
<https://iris.paho.org/handle/10665.2/55927>
- WHO consolidated guidelines on tuberculosis. Module 4: treatment. Drug-resistant TB  
<https://iris.paho.org/handle/10665.2/56062>
- WHO operational handbook on tuberculosis. Module 4: treatment. Drug-resistant TB  
<https://iris.paho.org/handle/10665.2/55997>

### Review of translations underway:

- WHO consolidated guidelines and operational handbook on tuberculosis. Module 2: screening
- WHO consolidated guidelines on tuberculosis. Module 4: treatment. Drug-susceptible tuberculosis
- WHO consolidated guidelines and operational handbook on tuberculosis. Module 5: management of tuberculosis in children and adolescents

- WHO e-courses on TB updated guidelines: module 1 (prevention) and 3 (diagnosis).
- Regional TB Report 2021
- Recordings of monthly regional virtual sessions Spanish/English can be sent upon request
  - TB surveillance
  - Global TB Plan
  - TB drugs
  - World TB Day
- Recording of the virtual regional workshop on the WHO updated guidelines on the management of TB in children and adolescents (can be sent upon request)

***Malaria-related products:***

- USAID LAC RMP Partner Meeting- PAHO Presentation, 1 October 2021
- Plan of Action for Malaria Elimination 2021-2025 (<https://iris.paho.org/handle/10665.2/56616>)
- World Malaria Report 2021 (<https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021>)
- Key discussions and conclusions from the meeting to eliminate malaria in the Guiana Shield, October 2021
- Technical material prepared for the follow-up meetings to agreements of countries of the Guiana Shield
- Workplan of the binational meeting held on the Colombia-Panama border, 5-9 September 2022 and technical report of the mission to Capurgana
- Virtual Course on Malaria Microscopy (<https://www.campusvirtualsp.org/es/curso/curso-de-diagnostico-microscopico-de-la-malaria-2021>)
- Follow-up on the consolidation of quality assurance processes for malaria diagnosis in Ecuador (Technical report)
- Technical Report on Quality Assurance of Malaria Diagnosis in Belize, 8-19 August 2022
- Dashboard proposal for risk benefit analysis in radical cure
- Technical material prepared for radical cure follow-up meeting, October 2021 (Meeting recording: <https://youtu.be/c9Xbn9OYzV4>)
- Strengthening therapeutic adherence and pharmacovigilance to antimalarial treatment in Manaus, Brazil: a multicomponent strategy using mHealth (<https://malariajournal.biomedcentral.com/articles/10.1186/s12936-022-04047-3>)
- Draft manual for simplified monitoring of possession and use of mosquito nets
- Virtual course on entomological surveillance and vector control (5 modules) (Costa Rica) <https://www.ministeriodesalud.go.cr/index.php/prensa/52-noticias-2022/1215-curso-virtual-permitira-actualizacion-de-conocimientos-sobre-malaria-dengue-zika-chikunguna-leishmaniasis-y-enfermedad-de-chagas>
- Microstratification and microplanning of malaria in localities of the departments of Beni and Pando, Bolivia (Technical report)
- Manual for the Stratification and Elimination of Malaria Foci
- Instrument and TORs for the Evaluation of Malaria Programs
- Framework to guide implementation and evaluation of chemoprevention strategies in the Americas
- Malaria Day in the Americas 2021 (<https://www.paho.org/en/campaigns/malaria-day-americas>) and 2021 Malaria Champions of the Americas Finalist Videos ([https://www.youtube.com/watch?v=NRMjMU873\\_c](https://www.youtube.com/watch?v=NRMjMU873_c), <https://www.youtube.com/watch?v=yniNikj8APA>)

- Consultations with countries and partners on rethinking the Malaria Champions initiative
- Concept Note: Rethinking the Malaria Champions Initiative

***NIDs-related products:***

- “Toolbox for trachoma elimination in the Americas Region”: PAHO Trachoma Toolbox Spanish
- “Microplanning manual to guide implementation of preventive chemotherapy to control and eliminate neglected tropical diseases”: NTD Microplanning Manual

***Reduction of Health Inequities-related products:***

- Health Inequalities in Latin America and the Caribbean: A Sustainable Development Goal baseline assessment for women, children, and adolescents. Washington, D.C.: Pan American Health Organization and United Nations Children’s Fund; 2022. License: CC BY-NC-SA 3.0 IGO. PAHO: <https://doi.org/10.37774/9789275125748>
- Desigualdades en la salud en América Latina y el Caribe: Una línea de base de los Objetivos de Desarrollo Sostenible para mujeres, niños y adolescentes. Washington, D.C.; 2022. Organización Panamericana de la Salud y Fondo de las Naciones Unidas para la Infancia. Licencia: CC BY-NC-SA 3.0 IGO. <https://doi.org/10.37774/9789275325742>
- No Time to Lose. Health Challenges for Adolescents in Latin America and the Caribbean. Washington, D.C.: Pan American Health Organization and United Nations Children’s Fund; 2022. License: CC BY-NC-SA 3.0 IGO. <https://doi.org/10.37774/9789275126219>
- Sanhueza, A., Carvajal, L., Cueva, D.A. et al. The Every Woman Every Child initiative: supporting countries in Latin America and the Caribbean to reduce social inequalities in health. *Int J Equity Health* 21, 83 (2022). <https://doi.org/10.1186/s12939-022-01682-9>
- Tutored synchronous virtual course on Maternal Near Miss (developed and validated in Dominican Republic, Paraguay, and Peru) <https://www.campusclap.org/course/view.php?id=2>
  - User: testuser
  - Password: Prueba\_1234
- To access the online DEMO of SIP plus that contain new Maternal Near Miss indicators: <http://www.sipplus.org>
  - User: guest Password: sigguest
  - Since real databases include sensitive information, you can’t access to real data base. Data included in the database is open, but a protocol must be sent to CLAP to analyze the database.
- Media campaign “28 Days, Time to Care and Love”: <https://www.paho.org/en/campaigns/28-day-campaign-newborn-health>
- Presentation Policy brief Strengthening Newborn Health in the Americas (document and matrix for baseline analysis attached): <https://www.youtube.com/watch?v=3skLT7GQe3I>
- Curso: Lineamientos para el seguimiento de recién nacidos prematuros, pequeños y gravemente enfermos (en proceso de alojamiento por parte del Campus Virtual de Salud Pública). <https://mooc.campusvirtualesp.org/course/view.php?id=293>

- eCBB/PAHO App. Accessible at Google Play and Apple Store (screenshot at right)
- Technical report: Assessment of implementation of audit review recommendations to reduce Near Miss cases, Stillbirths, and Maternal and Neonatal deaths: experiences from the Eastern Caribbean (available on the Google drive)
- Link to regional webinar “How health sector reform impact barriers to access titled [Are Our Health System Prepared to Move Toward Resilience and Universal Access to Health?](#)
- Link to regional access barriers assessments showcased in WHO’s [Tracking Universal Health Coverage: 2021 Global monitoring report](#), and PAHO’s brochure on [Building Resilient Health Systems to Advance toward Universal Health in the Americas: Lessons from COVID-19](#).
- HSS, EGC and the Regional Directorate of Health (DIRESA) Amazonas’s report “[Barriers and policy options for access to mental health services for adolescents and youth of indigenous peoples in the province of Condorcanqui, Amazonas, Peru 2021](#)” (in Spanish).
- HSS and EGC peer-reviewed article in the Pan American Journal of Public Health (PAJPH) on [barriers to access health services for women and children in Latin America](#).
- Drafted and submitted manuscript for a Special Edition on Rural Proofing for the Rural and Remote Health Journal: Identifying access barriers faced by rural and dispersed communities to better address their needs: implications and lessons learnt for rural proofing for health in the Americas and beyond (forthcoming). Preliminary results were showcased in [WHO’s global community in PHC](#).
- Drafted manuscripts on recommendations and lessons learned from implementation of access barriers; and the findings of these studies, including the main barriers identified, their relationship with the policy processes (forthcoming).
- Draft of the regional report “*Universal Health in the Americas: Towards a Better Understanding and Addressing the Access Barriers Faced by Vulnerable Populations*”.



**Links to selected institutions with webinars and virtual meetings supported by participation from the project:**

- WFME-World Federation of Medical Education  
<https://wfme.org/>
- FEPAFEM-PAFAMS  
<https://www.fepafempafams.org/>
- ALAFEM/UDUAL & UNAM  
<http://www.facmed.unam.mx/>  
[http://alafem\\_udual.facmed.unam.mx](http://alafem_udual.facmed.unam.mx)
- ORAS-CONHU: Organismo Andino de Salud – Convenio Hipólito Uname  
Red Andina de Asociaciones de Facultades de Medicina  
<http://orasconhu.org/portal/>  
[https://www.aspefam.org.pe/red\\_andina/](https://www.aspefam.org.pe/red_andina/)
- AFMC – Association of Faculties of Medicine of Canada  
<https://www.afmc.ca/en>
- The Network TUFH (Towards Unity for Health)  
<https://thenetworktufh.org/>
- ASPPH (Association of Schools and Programs of Public Health)  
<https://aspvh.org>

- ISAT Instrument (Indicators for Social Accountability Tool) / Digital platform developed in collaboration with other partners / Available in English, Spanish and Portuguese: <https://socialaccountabilityhealth.org/>

**Health information systems-related products:**

Some of the products created with the support of USAID include:

- Electronic Health Records and the Importance of How to Document <https://iris.paho.org/handle/10665.2/55410>
- Introduction to semantic interoperability <https://iris.paho.org/handle/10665.2/55417>
- Secure, Interoperable Patient Portals with Quality Data <https://iris.paho.org/handle/10665.2/55407>
- Interoperability in public health <https://iris.paho.org/handle/10665.2/56574>
- Change Management in Public Health <https://iris.paho.org/handle/10665.2/56579>
- Data disaggregation in public health <https://iris.paho.org/handle/10665.2/56578>
- Maturity Assessment Planning Guide <https://iris.paho.org/handle/10665.2/55663>
- Developing a National eHealth Strategy <https://iris.paho.org/handle/10665.2/55661>
- Functional Assessment Consultancy Terms of Reference <https://iris.paho.org/handle/10665.2/55664>
- IS4H Terms of Reference for ICT Assessment and Costing Consultancy <https://iris.paho.org/handle/10665.2/55666>
- Post description IS4H Manager <https://iris.paho.org/handle/10665.2/55665>
- Rapid assessment tool for critical data gathering <https://iris.paho.org/handle/10665.2/53614>
- Secure, Interoperable Patient Portals with Quality Data <https://iris.paho.org/handle/10665.2/55407>
- Elements for a Data Management Policy: Information Systems for Health <https://iris.paho.org/handle/10665.2/54961>
- National Data Governance Framework: Information Systems for Health <https://iris.paho.org/handle/10665.2/54960>
- Monitoring and Evaluation Framework on Information Systems for Health <https://iris.paho.org/handle/10665.2/55405>
- Functional Assessment on Information Systems for Health <https://iris.paho.org/handle/10665.2/55658>
- Guiding Principles: Information Systems for Health <https://iris.paho.org/handle/10665.2/55087>
- Glossary of terms on Information Systems for Health <https://iris.paho.org/handle/10665.2/54959>
- Set of Maturity Model Basic Recommendations: Information Systems for Health <https://iris.paho.org/handle/10665.2/54958>
- Maturity Assessment Levels: Information Systems for Health <https://iris.paho.org/handle/10665.2/54962>
- Artificial Intelligence in Public Health <https://iris.paho.org/handle/10665.2/53732>

## 5. PAHO-USAID Collaboration Success Stories

The success stories included on the following pages attempt to illustrate how the collaboration between PAHO and USAID strives to improve people’s lives and makes a difference in the beneficiary country.

# PAHO-USAID COLLABORATION SUCCESS STORY

---

## Children and adolescents: a key vulnerable population to end TB

### Virtual Regional Workshop on the management of TB in children and adolescents

Children and adolescents are being left behind in TB prevention, diagnosis, and treatment activities. The WHO estimates that 18,300 children up to 15 years of age are living with TB in the Americas, but more than half lack access to diagnostic and treatment services. In addition, COVID-19 has also had a disproportionate impact on children and adolescents with TB, resulting in increased transmission in their homes, reduced active surveillance, less opportunity to attend a health facility, and limited treatment follow-up. To improve this situation and ensure earlier diagnosis and treatment of TB in this age group, in 2022 WHO published updated guidelines and an operational manual for TB treatment in children and adolescents, including recommendations for expanded diagnostic testing and treatment, and new models of decentralized and integrated care to improve access to preventive care and treatment closer to home.

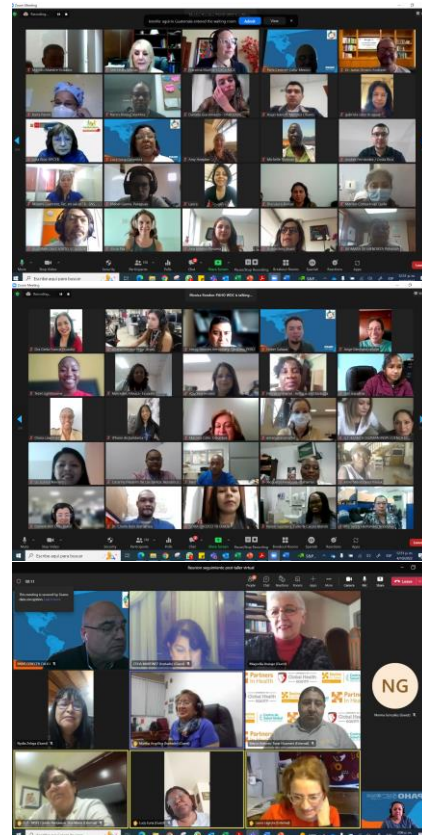
PAHO's regional TB Team in coordination with the Working Group on TB in Children and Adolescents in the Region of the Americas organized a regional virtual workshop to socialize the new WHO guidelines and the roadmap to end TB in this vulnerable population. This workshop was aimed at representatives of national TB programs (NTP) and child and adolescent programs, and at health professionals who collaborate with the NTP on this topic. More than 120 participants from 29 Spanish and English-speaking countries participated in this workshop.

During the workshop, the participants were updated on aspects of prevention, diagnosis, and clinical and programmatic management of TB in children and adolescents; 17 technical topics were presented by the 13 members of the Regional Working Group and other regional experts. Also, barriers and opportunities to accelerate a comprehensive approach to TB in children and adolescents in the countries were discussed, and participants had the opportunity to share their experiences on the management of TB in this population in their countries.

The development and results of the workshop were a success and all participants provided very positive feedback and showed interest in reproducing the workshop in their countries to update and train health professionals at all levels. All training materials were shared with participants to facilitate the replication of the workshop at the national and subnational levels, and the implementation in several countries will be supported by PAHO and the Regional Working Group in the context of the USAID project in 2023.

*Snapshots of closing session of the virtual workshop.*

Photo credit: PAHO Regional TB Team



*“Thanks to PAHO and the Regional Working Group for this update and for providing health workers with the tools to socialize these new guidelines, and thus address the commitments made by our countries to end TB in this vulnerable population by 2030”.*

*Dr. Celia Martínez - President of the Working Group on TB in Children and Adolescents in the Region of the Americas*

# PAHO-USAID COLLABORATION SUCCESS STORY

## The need to guide programmatic actions based on local evidence

### Prevalence of *pfHRP2* and *pfHRP3* gene deletion in symptomatic patients with *Plasmodium falciparum* malaria in six Colombian municipalities

Expanding the malaria diagnostic network in Colombia with the use of rapid diagnostic tests (RDTs) will allow the country to have timely diagnosis in areas where microscopy is not possible. To ensure that the RDTs used in the country are appropriate, it is vital to know the prevalence of *pfHRP2/3* gene deletion to guide RDT procurement and implementation. The *pfHRP2* deletion is one of the biological threats identified and monitored by WHO in the response to malaria worldwide and is of particular importance in South America because of its presence in the Amazon region of Peru. The deletion has been reported in Colombia, but its prevalence was not known in the Pacific region where the largest number of malaria cases in the country occurs.

The Ministry of Health of Colombia, in coordination with PAHO, implemented a study to understand the prevalence of the deletion of these important genes in the malaria parasite population to help guide the selection of appropriate RDTs. The study was implemented following a WHO protocol, and with the approval of local ethics committees and PAHO (PAHOERC) in six municipalities of the country: Quibdó, Tutunendo, Guapi, Buenaventura, Río Quito, and Tumaco. Ten sites were selected for sample collection and 370 samples were collected. After the final analysis, 347 patients were included (53% men and 47% women, aged 16 to 75 years) and 23 samples were discarded for not complying with the inclusion criteria. The results showed 16 cases suspected of being infected with the *pfHRP2* deletion strain (false negatives by RDT), which were studied through molecular biology showing that the *pfHRP2* gene was present in 100% of those 16 samples, and that the *pfHRP3* gene was present in only one sample, with a deletion percentage of 0% for the *pfHRP2* gene and 93.75% for the *pfHRP3* gene. The result shows that there is no deletion in the *pfHRP2* gene, which supports the continued use of RDTs based on the detection of *pfHRP2*. In addition, the study's results reveal problems in the use and management of RDTs in the field, highlighting the need for a good monitoring program, as well as the continue surveillance of this deletion.

Thanks to these results, the country can guide its interventions to expand the malaria diagnostic network based on the use of RDTs that detect the *pfHRP2* gene, to access the most remote areas of the country and achieve timely access to quality diagnosis.



Supervision visit to the ESE Hospital Ismael Roldan Valencia.  
Photo Credit: PAHO



Samples taken for the study at the Tutunendo Health Center, Quibdó.  
Photo credit: PAHO

# PAHO-USAID COLLABORATION SUCCESS STORY

---

## Guatemala advances toward the elimination of trachoma

### **Integrated eye health services for people with trichomatous trichiasis**

Guatemala is one of the four countries where trachoma is a public health problem in the Region of the Americas, where 95,000 people in two districts in the Sololá department have benefited from integrated interventions to eliminate this disease. Repeated eye infections from *Chlamydia trachomatis* over many years cause scarring on the inside of the upper eyelid, which in turn causes the eyelid to deform so that the eyelashes eventually turn inwards and rub against the eyeball (a condition known as trichomatous trichiasis-TT) causing pain, discomfort, and permanent damage to the cornea.

Guatemala carried out an active house-to-house search of TT cases in the two endemic districts in 2019 and 2020 and performed surgery in 41 cases in 2019, but 100 cases were still pending surgery. Most of the affected people are indigenous. Surgeries were performed in the closest health center to the trachoma-endemic communities.

The Ministry of Public Health and Social Assistance of Guatemala (MPHSA), in partnership with the Pan American Health Organization (PAHO) and with the support of USAID seed funding, carried out a health campaign to operate people affected by TT in Sololá from 7 to 28 May of 2022 to reduce the progression to visual impairment and eventual blindness. The campaign benefited 212 people. Forty-five cases of TT were identified, and 30 cases were operated on. Other eye diseases such as cataracts, pterygium, and refractive errors were identified, and people were referred to receive integrated eye health care. With the support of Sightsavers, the MPHSA used an electronic system called TT Tracker to register suspected cases of TT, the surgery procedure, and follow up on them after the surgeries, making Guatemala a pioneer in using this type of digital platform in the Region of the Americas.

Guatemala is the country in the Americas that is closest to eliminating trachoma as a public health problem. It is expected that surveys will soon be conducted to determine whether it has managed to reduce the prevalence of a) active infection in children aged 1 to 9 years to less than 5% and b) TT to less than 0.2% in persons aged 15 years and older, and c) to demonstrate that it can detect cases of trichiasis and operate them timely through its primary health care system.



*A woman affected by trichomatous trichiasis is being evaluated by an oculoplastic surgeon in Sololá, Guatemala, 2022.*  
Photo credit: Pan American Health Organization.

*“This integrated surgery campaign has allowed us to improve the quality of life of our trachoma patients and raise awareness in communities about preventable blindness. It has brought us, physicians, closer to the needs of patients who do not have access to ophthalmology services.”* Diana Meneses, ophthalmologist and oculoplastic surgeon of Guatemala



# PAHO-USAID COLLABORATION SUCCESS STORY

---

## Telemedicine projects for NCDs: Lessons learned

### Telehealth improved care in Barbados, Dominica, and Trinidad & Tobago

Noncommunicable Diseases (NCD) are a global health problem, taking the lives of 5.5 million people a year just in the region of the Americas. Helping chronic NCD patients is a difficult proposition, that was made even more so during the COVID-19 pandemic, when health services became overwhelmed. The adoption of digital technologies was one of the most important responses from the health sector to this problem, and millions of people in the Western Hemisphere are benefiting.

Countries such as Barbados, Dominica, and Trinidad & Tobago implemented telehealth strategies to provide remote care to people living with NCDs, which allowed continuity and quality in the provision of health services, saving many lives in the process.

In Trinidad & Tobago, doctors called clients via telephone instead of seeing them in a health center. The consultation included an assessment of symptoms, vital signs, and medication adherence. “Telemedicine allowed for a vital communication link between patients and health care workers, maintained access to health care and NCD medications during the pandemic, and really helped to ease the burden on our secondary and tertiary centers,” says Dr. Osafo Fraser, from Trinidad & Tobago’s Ministry of Health.

Dominica has also used telehealth during the COVID-19 emergency, and it proved to be an essential part of the response to the pandemic. The use of digital technologies to assist patients with NCDs and other non-critical illnesses has become part of the health care system of Dominica, benefiting countless people in the country.

In Barbados, PAHO’s technical cooperation - always with USAID’s generous support - is strengthening information systems for Health throughout the country, a process that will ensure a sustainable implementation of the digital transformation of the health sector. National eGovernment initiatives, legislation and policy, financial sustainability, human resources, telehealth, data management and analysis capabilities, are all benefiting from this cooperation.



*PAHO’s Evidence and Intelligence for Action in Health representatives visit Barbados to learn about the country’s digital transformation projects.*

Photo PAHO/WHO Representation in Barbados

“Telemedicine allowed for a vital communication link between patients and health care workers, maintained access to health care and NCD medications during the pandemic, and really helped to ease the burden on our secondary and tertiary centers.” – **Dr. Osafo Fraser, County Medical Officer, Ministry of Health Trinidad and Tobago**