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List of Acronyms and Abbreviations

ACD	Active case detection
ACT	Artemisinin-based combination therapy
CAWG	Communication and Advocacy Working Group
CBE	Competency Based Education
CDC	Centers for Disease Control and Prevention
CDE	Communicable Diseases and Environmental Determinants of Health Department
CLAP	Latin American Center for Perinatology
DHS	Demographic and Health Surveys
DTI-R	Detection, Treatment, Investigation and Response Strategy
ECC	Eastern Caribbean Countries
EIH	Evidence and Intelligence for Action in Health Department (PAHO)
ENAP	Every Newborn Action Plan
EQAP	External Quality Assurance Program
EWEC-LAC	Every Woman Every Child-Latin America and the Caribbean
FIGO	International Federation of Obstetrics and Gynecologists
FLASOG	Latin American Federation of Obstetrics and Gynecologists
FGL	Family, Gender and Life Course Department
GTR	Regional Task Force on Maternal Mortality Reduction
HIS	Health Information Systems
HIV	Human Immunodeficiency Virus
HSS	Health Systems and Services Department (PAHO)
ICD	International Classification of Diseases
ICM	International Confederation of Midwives
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
MCSP	Maternal Child Survival Program
MDA	Mass Drug Administration
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MMWG	Metrics and Monitoring Working Group
MNM	Maternal Near Miss
MOH	Ministry of Health
MOC	Ministry of Communities
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
PAJPH	The Pan American Journal of Public Health
PCT	Preventative chemotherapy
PSIWG	Policies, Strategies and Interventions Group

RDTs	Rapid Diagnostic Tests
RELACSIS	Latin American and Caribbean Network for Health Information Systems
RMEI	Regional Malaria Elimination Initiative
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health Strategic Plan
SP	Schistosomiasis
SDGs	Sustainable Development Goals
SIP	Perinatal Information System
STH	Soil-Transmitted Helminthiasis
TAG	Technical Advisory Group
TB	Tuberculosis
TT	Trachomatous Trichiasis
TWG	Technical Working Group
UH	Universal Health
UHC	Universal Health Coverage
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
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 period from October 2019 to September 2020, the fourth year in the current grant agreement. The report is divided into five sections; the first section highlights the main achievements, key activities and deliverables, lessons learned and challenges from the fourth 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 toward achieving the outcome indicators as established in the grant agreement; the fourth section provides a list of products developed during the fourth project period; 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.

Of note, throughout the report several common threads emerge, including the need for technical teams to overcome the significant challenges posed by the emergence and spread of COVID-19 throughout the region, beginning in March 2020. Widespread travel restrictions and the need for ministries of health to divert in-house resources towards pandemic response disrupted previously planned USAID-supported activities and required PAHO's technical teams to make adjustments and seek out creative approaches in order to continue to provide technical cooperation and advance with public health agendas. This challenge was coupled with funding level uncertainties, which compelled some teams to redistribute planned resources and further edit their workplans. Despite these obstacles, significant progress was achieved in 2019-2020 and technical teams look forward to continued collaboration during 2020-2021.

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

Topic 1: Tuberculosis

Tuberculosis (TB) is an ongoing public health problem in the Americas and continues to be the first killer among infectious diseases. According to the latest official information, 289,000 incident cases and 23,000 deaths were estimated in the region for 2018. During that year, 235,000 new and relapse TB cases were notified, leaving a gap of 53,000 cases undiagnosed and untreated. Ten percent (10%) of reported TB cases were coinfecting with HIV and 4,908 out of 11,000 estimated drug resistant cases were reported. Eight countries made up for 82% of the cases (Brazil, Peru, Mexico, Haiti, Colombia, Venezuela, Argentina and Bolivia) while 15 countries had 10 cases per 100,000 population or less. TB occurs among poor and vulnerable populations, namely indigenous people, prisoners, children, and people living in the streets, among others.

The activities conducted during this reporting period have been framed by the End TB Strategy, PAHO's Regional Action Plan for TB Prevention and Control, and the commitments made by Member States in the United Nations High Level Meeting on TB of 2018. They aim to accelerate actions towards TB elimination addressing vulnerable populations and comorbidities, using innovative initiatives, with inter-programmatic and intersectoral approaches, and involving communities and civil society.

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

- Contribution to the implementation of recommended interventions during the monitoring visits to high TB burden countries, or Epi-reviews, conducted during the previous year.
- Development, finalization and/or translation of technical documents, including reports and training materials, to facilitate the implementation of interventions to address TB prevention and control in countries with emphasis on vulnerable populations.

- Continued advocacy for TB, through development and distribution of regional materials to all countries for World TB Day commemoration.
- Ongoing implementation and follow-up of initiatives such as ENGAGE-TB with civil society, the USAID-PAHO fellowship program and TB elimination.
- Ongoing provision of technical support to countries and adaptation of activities to virtual formats due to the COVID-19 pandemic.
- Increasing support to low TB incidence countries moving forward towards TB elimination, including visits to Costa Rica (in person) and to Jamaica (virtual).
- Increased communication with countries, advisory groups, partners, and civil society through regional virtual meetings to guide adaptation of interventions for maintaining provision of TB services during the extraordinary times of the current pandemic.
- Continued coordination and involvement of civil society to support national tuberculosis programs (NTPs).
- Strengthening capacity for TB prevention and control through sponsoring participation of young professionals in the regional TB training course on TB epidemiology held jointly with The Union.
- Better knowledge of the TB situation in the region through consolidation and analysis of country information reported to WHO's data collection system.
- Continued support for human resources on the Regional TB Team and its capacity to provide technical support to countries.

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

- Implementation of recommended interventions during the monitoring visits to high TB burden countries, or Epi-reviews, conducted during the previous year (reports included as deliverables in the USAID YR4 mid-year report in May 2020).
- Development and distribution of World TB Day commemoration materials and video.
- Virtual meeting of the Technical Advisory Group (TAG-TB) in December 2019 to follow-up on progress made.
- Participation in The Union-North American Region (NAR) Conference held in Chicago in February 2020 (travel report sent with USAID mid-year report)
- Visits to low incidence countries within the TB elimination initiative: Costa Rica (in person) in March (travel report sent with USAID mid-year report) and Jamaica (virtual) in July (visit report available upon request).
- Translation of WHO documents to Spanish, including:
 - ✓ Rapid Communication: Molecular assays as initial tests for the diagnosis of TB and RR
 - ✓ Roadmap towards ending TB in children and adolescents
 - ✓ WHO consolidated guidelines on drug-resistant tuberculosis treatment
 - ✓ Information notes, recommendations, and infographics on TB and COVID-19
- Development of infographics and GIFs for social media on TB and COVID-19.
- Development of regional TB report 2019 (Spanish version available; English version being finalized).
- Advocacy and follow-up for the implementation of the Multisectoral Accountability Framework for TB in countries.
- Development of an e-learning course on TB/HIV clinical management based on regional guidelines developed with support from previous years of the grant. Currently under finalization.
- Final preparations for the implementation of the Catastrophic Cost Survey in Colombia that has been delayed due to the COVID-19 pandemic.

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

- Between the end of 2019 and 2020 there were delays in the implementation of some activities due to PAHO's administrative transition into a new biennium and strategic plan.
- The current COVID-19 pandemic has resulted in the need to cancel several in-person activities and postpone and modify others to a virtual scenario. Uncertainty remains regarding the timeline for these adjustments, based on travel restrictions and the behavior of the pandemic.
- Despite travel limitations and restrictions due to the COVID-19 pandemic, communication with countries and provision of technical support have shown to be feasible in great part using virtual channels.
- The pandemic has also shown that NTPs are resilient despite the challenges posed and that paradigms on TB care can be changed and adapted readily to the circumstances.
- Uncertainty with respect to the timeline for the use of the available USAID funding and additional resources for YR5 of the grant, limited the implementation of activities for some weeks.

Topic 2: Malaria

Malaria remains one of the priority public health issues across the region. While several countries in the Americas are getting closer to eliminating the disease, the increase in malaria transmission since 2015 shows the vulnerability of the results achieved to date.

In 2016, countries approved the Regional Plan of Action for Malaria Elimination 2016-2020. Support from USAID has been critically important for the implementation of this plan, as well as PAHO's work to operationalize the main elements of the Global Technical Strategy against Malaria 2016-2030 and the WHO Global Framework for Elimination. The concept of "surveillance as intervention" and a targeted approach to addressing malaria foci have been central to these efforts. Under the concept of "elimination as a continuum," the PAHO-USAID umbrella agreement has supported both the consolidation of the achievements in countries that are close to eliminating malaria (E-2020 initiative) and the reorientation of operations in countries with the highest number of cases. Actions have also been oriented to align efforts with the Global Fund, regional initiatives such as the Regional Malaria Elimination Initiative (RMEI), and in general to channel the actions of different partners towards mutual agreed-upon regional technical goals in order to optimize the use of resources.

Through this umbrella agreement, USAID has contributed to the following main topics of the current Regional Plan: the new approach to risk stratification; microstratification; malaria data reporting and analysis; tools to organize malaria interventions at the foci level; the DTI-R strategy (diagnosis, treatment, investigation, and response); the platform to support actions in municipalities with a high malaria burden; improvements in the use of rapid diagnostic tests; and capacities in microscopy.

During Year 4, it also became necessary to adapt technical cooperation and priorities towards the objective of mitigating the effects of the COVID-19 pandemic on the malaria response in the region.

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

- During the COVID-19 pandemic, despite the majority of countries having presented a reduction in malaria detection, and an increase in transmission in some countries, in general the beneficiary countries have maintained malaria actions, adapting key malaria interventions to the pandemic situation, while implementing measures to protect health workers.
- The potential occurrence of shortages of antimalarial medicines and rapid diagnostic tests has been prevented during the COVID-19 pandemic. To date, no beneficiary country has had to interrupt malaria

operations due to a lack of antimalarials because of support from PAHO and the CDE/VT Regional Warehouse.

- A new technical cooperation process has been initiated to guide decisions in vector control based on the development of a toolbox to guide actions at the national level. Support was provided to begin the process to update the national strategies and plans for vector control in some countries.
- The malaria response in Venezuela was supported through the donation of 70,000 tests for rapid diagnosis of malaria.
- Countries completed the process of notification and reporting of cases and actions during 2019 for the World Malaria Report and the analysis of the malaria situation in the region.
- Declines in malaria surveillance due to COVID-19 were identified and addressed through extensive and almost weekly feedback with PAHO country staff and ministries of health.
- Annual updates to malaria stratification and micro-stratification exercises were supported in Belize, Costa Rica, Panama, Suriname, and Colombia. Significant progress was made in the implementation of an approach focused on identifying and setting up operations at the level of malaria foci. Several countries are implementing this approach to date.
- A methodology for the sub-national verification of the absence of malaria transmission was developed.
- The process of consolidating the Region's Plan of Action for Malaria Elimination 2021-2025 is in progress and is leveraged as a mechanism for capacity building and supporting countries in their respective malaria strategic dialogue, planning, monitoring, and evaluation efforts. To date, the process has involved approximately 165 people representing counterparts from at least 26 countries and 20 partner institutions.
- The activities developed and supported through the PAHO-USAID umbrella agreement are well articulated with other efforts in the region and by partners such as the Global Fund and RMEI.
- As in previous years, since 2009, three malaria best practices (from high-burden malaria municipalities in the Region) were awarded with the distinction of Malaria Champions of the Americas during Malaria Day in the Americas 2019. During Year 4, support was provided for the 2020 nomination and selection process and at least three additional best practices from high-burden municipalities will be conferred the distinction of Malaria Champions of the Americas (for effectively continuing malaria efforts and protecting health workers amidst COVID-19) during the regional virtual event scheduled on 28 October 2020 (in commemoration of Malaria Day in the Americas 2020).

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

- Throughout the COVID-19 pandemic, PAHO has issued and disseminated recommendations on measures to sustain malaria elimination efforts.
- Following WHO and TAG recommendations, PAHO developed and implemented a pilot project to strengthen patient counseling, adherence, and pharmacovigilance to improve patient safety in radical cure policies with primaquine. The pilot in Brazil continued and was extended until the end of 2020. The preliminary results were shared monthly with the involved partners.
- The collection of samples on filter paper from positive *P. falciparum* cases is ongoing as part of the alert system to detect possible emergence of artemisinin resistance.
- Various competence assessments for microscopy at the national level (NCAMM) were implemented from October 2019 to March 2020, as reported in the YR4 mid-year report in May 2020.
- Antimalarial country stock reports were received from Member States, and bulletins were prepared for Q1 and Q2. PAHO is currently collecting Q3 data.
- A toolbox was developed to guide key decision-making actions in malaria vector control. The approach guides the prioritization of communities for vector control, the selection of interventions, the selection of

insecticides, and implementation of algorithms for insecticide resistance management. The documents were translated to Portuguese and the Vector Control Toolbox is being implemented in Panama, Dominican Republic, Brazil, and Colombia.

- Materials were developed in the Dominican Republic to provide virtual training of health personnel on malaria case management, and case management guidelines were updated for Belize, Colombia, and Panama.
- Country-specific support/mentorship on technical and operational skills in malaria elimination (e.g. data management, foci identification, investigation, etc.) is being conducted in Suriname. Training was provided to strengthen malaria surveillance and case management with the medical community.
- Annual updates to malaria stratification and micro-stratification exercises were supported in Belize, Costa Rica, Panama, Suriname, Colombia, and the Dominican Republic.
- Excel-based dashboards have been implemented at the department level in Colombia, as well as in priority municipalities.
- DHIS-2 based WHO malaria case notification and investigation modules were developed and will be implemented in Suriname beginning in November 2020. Discussions are also being held with Guyana which has shown interest.
- Surveillance guidance in Panama is currently being updated and supported by PAHO/WHO.
- The Manual for Malaria Risk Stratification and Elimination of Foci of Transmission is being finalized in Spanish and English.
- An inventory of regulatory barriers in malaria was developed in Colombia, Brazil, and Ecuador with preliminary progress in addressing key topics with authorities and partners in some countries (Colombia and Ecuador).
- Direct support was provided to malaria actions in high-burden municipalities (Colombia, Peru, Haiti, and Guyana).
- An updated National Strategic Plan and formulation of the Global Fund project was completed in Haiti, with special emphasis on stratification and prioritization of the distribution of long-lasting insecticidal nets (LLINs).
- In collaboration with PAHO's Communications department, capacity building in storytelling/documentation of country's best practices has been conducted virtually with national counterparts in Brazil, Colombia, Guyana and Haiti, including at least 9 municipalities with the highest malaria burdens in the Region.

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

- Innovative solutions for data sharing and surveillance implemented by local staff were on display everywhere, from chat groups to cloud-based spreadsheets and other solutions. Perseverance of front-line staff and local innovation should not be overlooked.
- Technical support and capacity building efforts are scalable, which means that more can be done, and desired results can be achieved more efficiently and effectively given enough resources.
- PAHO's presence at country level in coordination with the regional team has been key to support main malaria activities during the current COVID-19 pandemic, providing strategic guidance to maintain case management efforts and at the same time promoting the safety of the malaria workers.
- Communication technologies helped to mitigate the effects of the pandemic on technical cooperation in malaria, so that the delivery of cooperation has been maintained, but using new modalities, including remote meeting platforms and calls.

- During the pandemic, the importance of strengthening primary health care, as well as the relevance of strategies to support community workers for the availability of prompt diagnosis and treatment has become evident and they are important lessons for countries and health systems.

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

- A major challenge in the second half of Year 4 was the resource constraints brought on by the cancellation of the second tranche of funding for the malaria workplan and the arising institutional adjustments in the implementation of planned activities that needed to be made. The continuity of the operations of the regional malaria team will be seriously affected in 2021, as will direct technical cooperation with field consultants in the countries if no additional resources are available going forward.
- Due initially to restrictions caused by the COVID-19 pandemic and then by the grant's financial constraints, some activities that were originally planned for Year 4 were unable to be completed and had to be canceled or postponed. This included the support for the national and the external competency assessments of malaria microscopy (NCAMM and ECAMM), the promotion of experience with habitat modification in malaria control and the field support in foci control. Other activities were able to be carried out remotely and/or with support from other partners (such as the primaquine efficacy study and related agenda, and the development of a strategy for malaria in gold mining). PAHO recognizes and appreciates the effort made by USAID to mitigate the impact on the workplan with the involvement of other partners to carry out specific studies on radical cure, as recommended by PAHO TAG and originally planned for Year 4.
- Disruptions caused by the COVID-19 pandemic not only affected malaria interventions but also affected the countries' overall health systems, adding more challenges for the population to access healthcare as well as for the personnel supporting the multiple interventions.
- Five countries experienced risk of stock-outs of antimalarials and other key malaria commodities (Haiti, Dominican Republic, Colombia, Guatemala, and Guyana) due to supply chain management system problems at the local level and delays in current procurement processes in Haiti, outbreaks in the Dominican Republic that required more antimalarials than the planned amount, and delays in procurement processes due to COVID-19 pandemic challenges in Colombia, Guatemala, and Guyana.

Topic 3: Neglected Infectious Diseases

Neglected infectious diseases (NID) impose a large burden on the lives of marginalized populations across the globe. Disease burden disproportionately affects the most vulnerable communities, as it is linked directly to levels of poverty and income inequality. In 2018 it was estimated that at least 13% of the approximately 648 million inhabitants of Latin America and the Caribbean (LAC) lacked access to safe water supplies and 55% lacked access to adequate sanitation facilities, placing them at heightened risk of contracting a NID.

In 2016, PAHO's Directing Council approved the "Plan of Action for the Elimination of Neglected Infectious Diseases and Post-elimination Actions 2016-2022" and in 2019 the 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, 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 the elimination or the control of selected NIDs with particular emphasis on the neglected diseases that can be

targeted through preventive chemotherapy including, but not limited to, lymphatic filariasis (LF), onchocerciasis, schistosomiasis (SCH), soil-transmitted helminthiasis (STH) trachoma, taeniasis/cysticercosis, and human fascioliasis. The NID Program’s qualified staff provides continued and high quality technical cooperation to countries throughout the region for the development and implementation of integrated national and/or local NID strategies and action plans towards the prevention, control and elimination of NIDs, as well as to strengthen national capacities for surveillance, monitoring and evaluation, data management and analysis activities in endemic countries for NIDs.

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

LF Elimination in Guyana: Implementation of IDA Treatment Mass Drug Administration (MDA)

- The MDA in Guyana was implemented between October 31 and December 18, 2019. Based on developed micro plans, the MDA distribution strategies that were employed with the support of USAID included fixed points, in schools (for school-age children) and by household (mobile teams administering drugs house-to-house) as a mop-up strategy. These distribution strategies were used in combination, according to the characteristics of each of the villages or communities, to maximize overall coverage. The campaign achieved an overall coverage of 75% and in regions 3, 4, 5 and 6, where 86% of the at-risk population lives, coverage rates reached equal or greater than 70% (see below).

IDA Coverage per Region, Guyana, October 31 – December 18, 2019.

Region	Target Pop. (Census)	Coverage	Coverage (%)
Region 1	5,803	4,266	73.5
Region 2	44,347	33,301	75.1
Region 3	107,785	80,770	74.9
Region 4	311,563	238,437	76.5
Region 5	49,820	35,061	70.4
Region 6	108,233	81,867	75.6
Region 7	9,806	9,533	97.2
Region 10	39,992	27,082	67.7
Total	677,286	510,317	75.3

Trachoma

- A regional meeting- “An Integrated Approach to Trachoma, other Neglected Infectious Diseases and Eye Diseases that Can Cause Blindness in Remote Amazon Populations” was held in Panama City on October 21 and 22, 2019. The objective of this meeting was to establish a roadmap for an integrated approach to tackle trachoma, other neglected infectious diseases, and eye diseases causing blindness in hard-to-reach populations in the Amazon Basin. After analyzing the challenges and opportunities to provide health services to the population living in this geographical area, and reviewing the possible methodologies for integrated mapping of several NID, trachoma, and eye health problems and associated factors, a draft set of integrated actions to tackle these diseases was proposed, aimed at helping countries incorporate them as part of their national public health plans. The meeting report was subsequently published and can be accessed via <https://iris.paho.org/handle/10665.2/52508> (it is also included in the report under Section 4. “Products Developed during Current Project Period”).

Key activities and deliverables during the grant period include:

- The staff of PAHO's NID program has continued to provide technical cooperation to all the countries in need aimed at improving and strengthening their NID control and elimination programs using all means available during the COVID-19 pandemic. Prior to the pandemic, in-person capacity building was carried out to prepare for the implementation of the LF MDA in Guyana, via training of national and local health workers and microplanning workshops. Training was also conducted to advance trachoma elimination in several countries during the meeting held in Panama in October 2010.
- To support the process of validation of elimination of schistosomiasis as a public health problem in Saint Lucia, a draft of a community-based survey protocol to establish prevalence in school age children and adults was developed.
- To improve monitoring and evaluation of deworming practices, a regional virtual training workshop for the analysis of coverage data for soil-transmitted helminth infections in countries of the Americas was developed, to be carried out in November 2020. Workshop preparations have included the organization of the agenda, logistical requirements and the preparation of educational materials-including presentations, guides for practical exercises and electronic data files for each country for coverage analysis.
- Several draft guidelines have been developed, including:
 - Recommendations to register and follow-up trachomatous trichiasis cases.
 - Recommendations to plan and implement trachomatous trichiasis campaigns.
 - Formulation of Integrated Plans for NID
 - Microplanning tool (school-based and community-based) guide for implementation of MDA for preventative chemotherapy (PCT) of NIDs in the Americas.

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

- The MDA 2019 in Guyana showed that an IDA is feasible to implement if appropriate planning, microplanning, organization and follow up is ensured in every implementation unit (IU). This effort also provided an opportunity for renewed engagement and support from national and local governments on LF elimination. Acceptability assessment results of MDA were also useful to review and update national communication strategies.

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

- As mentioned throughout this report, in 2020 the COVID-19 pandemic has hit the Americas Region particularly hard. Following WHO's recommendations, the countries implementing community-based activities, such as MDA, community or school-based surveys, and active search for cases, either suspended or postponed them. Unlike other technical cooperation efforts such as regional meetings, these on-the-ground activities do not translate easily to virtual modalities; this included the implementation of schistosomiasis surveys planned for YR4 in both the Dominican Republic (preparation of this survey protocol was discussed in the mid-year report) and in Saint Lucia.
- In many countries, the ministries of health officials working with the NID programs were also asked to support the COVID-19 response, removing them from the daily operations of these programs. The countries have been informed of the WHO recommendations on the resumption of activities in the context of the pandemic but the impact of COVID-19 on the national NID programs, plans, and interventions will last for the remainder of 2020 and likely well into 2021.

Topics 4-6, 8 (originally): Health Inequities (new in YR4)

Beginning in YR4, an inter-programmatic workplan was launched to support the countries of Latin America and the Caribbean in accelerating their efforts to eliminate social inequities in health. The activities included in the workplan are interdepartmental, linking together programs and work in the 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). By building on existing experiences, intentionally seeking out synergies and using evidence-based knowledge, the intent of this workplan was to build capacity among Member States. The plan was divided into three strategic lines of effort, namely to:

- i. Promote the measurement and documentation of social inequities in 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

Background

To address the large health inequities that exist both within and among countries in the Americas, the inter-agency movement Every Women, Every Child- Latin America and the Caribbean (EWEC-LAC) was formed with the shared leadership of 8 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. EWEC-LAC operationalizes its work through three working groups: 1) the Metrics and Monitoring Working Group (MMWG); 2) the Communication and Advocacy Working Group (CAWG); and 3) the Policies, Strategies and Interventions Group (PSIWG). At PAHO, the technical secretariat of EWEC-LAC sits within FPL but staff from several departments are involved in the movement, which advocates for and supports the development and implementation of evidence-based policies, strategies and interventions to accelerate equitable progress in the health of women, children and adolescents by:

- Keeping Women, Children and Adolescent's health equity on top of the political and public agenda through regional, sub-regional, and national advocacy efforts towards the adaptation and implementation of the Global Strategy in the Americas
- Promoting and strengthening country capacity to analyze WCA health inequalities and multi-sectoral determinants, and monitor progress towards the Global Strategy targets
- Promoting and supporting country adoption and implementation of pro-equity health policies, strategies, and evidence-based interventions

Two of the central objectives of the Global Strategy for Women's, Children and Adolescents' Health include: **Survive** (End Preventable Deaths) and **Thrive** (Ensure Health and Well-Being) and many of the interventions included in the health inequities workplan in YR4 were aimed at strengthening these objectives and their related targets.

Given the burden of neonatal mortality and that inequalities constitute one of the main problems to be addressed, activities related to generating evidence and giving visibility to existing inequalities were emphasized. An additional area of work aimed to improve the quality of care for newborns in LAC, particularly for those infants experiencing risk conditions, through the generation of tools, technical guidelines, and improved surveillance to

help target countries, health services, and health teams advance in the elimination of preventable perinatal mortality.

In the Americas, in recent years, reductions in maternal mortality have slowed. In LAC, this trend is of particular concern in countries including Brazil, the Dominican Republic, Mexico and Venezuela, an issue that was highlighted in last year's final report. This concern, however, has been superseded by the emergence and spread of COVID-19 and its devastating effect on maternal mortality; it is likely that official estimates of maternal mortality in 2020 will show the erosion of the gains of recent years. Undressing the fragility of the health systems in LAC and intensifying actions in maternal health to save the lives of women and their children is of utmost concern moving forward.

The substantial gap between the need for healthcare and the level of access is well established. In 2017, the World Health Organization (WHO) estimated that at least half of the world's population lacks access to needed health services, and that if current trends continue, up to one third of the world's population will remain underserved by 2030, with no access to health services. Measuring what segments of the population are unable to seek and use health services and what the main barriers, are first fundamental steps towards determining future sustainable solutions. Within this context, PAHO has made efforts to measure and eliminate access barriers to health in the Americas, including mapping access barriers indicators for which data can be derived from household surveys in the Americas; conducting in-depth secondary data analysis of equity and access barriers in the Americas; and guiding country policy-making towards reducing access barriers through country missions. Regional commitment to the assessment and elimination of access barriers is supported by Resolution CD53.R14, Strategy for Universal Health, which was adopted in 2014 with a view of achieving that goal. This is further evidenced by PAHO's new Regional Compact on Primary Health Care (PHC 30-30-30) and PAHO's new Strategic Plan for the period 2020-2025, which sets out the explicit target of reducing access barriers to health.

Finally, at a time when the world is facing an unprecedented situation due to the COVID-19 pandemic, health systems are looking -more than ever before- for innovative strategies to reduce health personnel shortages and maldistribution while maintaining adequate capabilities. In its Regional Strategy on Human Resources for Health (2017), PAHO highlighted a health workforce crisis with disastrous implications for the health and well-being of millions of people in the Americas. In addition, there is a "chronic" disconnect between health and education systems that results in a mismatch between supply of health and social care workers and the health care needs of the population. That is particularly challenging at the first level of care in underserved areas with vulnerable populations and a contributing factor to social inequities in health. COVID-19 has increased the need for interprofessional teamwork and socially accountable education to improve health inequities, clinical outcomes and to prevent errors. Educating and training the health workforce within the context of the social determinants of health should strengthen health services and reduce barriers to effective universal access and health coverage.

Some of the **main achievements** that stand out during the fourth year of the grant include:

- The document "Inequalities in Maternal, Child, and Adolescent Health in Latin America & the Caribbean: A regional baseline assessment of the EWEC-LAC indicators for the Agenda 2030" was finalized and is currently under review. The MMWG led the development of this regional report on baseline inequalities in LAC. The report includes data for 21 countries in LAC that were extracted and analyzed from the most recent Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Survey (MICS). The conditions of women's, children's and adolescent's health are described through the disaggregation of selected social/socioeconomic indicators and EWEC-LAC developed profiles of social inequalities in maternal, child and adolescent health indicators for these same 21 countries.
- A selection of articles was published on health inequities among women, children and adolescents:

- A scoping review on bottlenecks and barriers for effective coverage of early childhood health and development interventions in Guatemala: <https://www.paho.org/journal/en/articles/bottlenecks-and-barriers-effective-coverage-early-childhood-health-and-development>
- A case study on accountability for women's, children's and adolescents' health (included in the IAP's 2020 report). The case study was conducted as a way of amplifying country experience and the voices of women, children and adolescents. <https://iapewec.org/wp-content/uploads/2020/07/IAP2020-Report-Guatemala-Full-Case-Study.pdf>; <https://iapewec.org/casestudies/>
- "Behavior and social inequalities in prioritized indicators of Sustainable Development Goal 3 in Bolivia". Nava MF, Esquivel Velásquez AD, Patón Sanjines M, Pooley Ayarza BC, Alarcón R, Hernández Muñoz R et al. Comportamiento y desigualdades sociales en indicadores prioritizados del Objetivo de Desarrollo Sostenible 3 en Bolivia/. Rev Panam Salud Publica. 2020;44:e101. <https://doi.org/10.26633/RPSP.2020.101>
- "Health and social inequalities in maternal and child health in Paragua" Tullo E, Lerea MJ, González R, Galeano J, Insfrán MD, Muñoz M, et al. Desigualdades sanitarias y sociales en la salud materna y del niño en Paraguay. Rev Panam Salud Publica. 2020;44:e107. <https://doi.org/10.26633/RPSP.2020.107>
- A data extraction tool and template for assessing quality of newborn care and monitoring outcomes was designed and tested, and other materials and guidelines were developed to support countries in addressing and monitoring newborn conditions that affect mortality and early morbidity, such as congenital defects or other conditions. Due to COVID-19, all resources developed within the framework of the umbrella agreement during the second half of the year were presented to countries during virtual sessions for subsequent implementation to sustain essential care for newborns, and particularly those who are premature and seriously ill.
- There has been an increase in the number of countries in LAC that have a registry for surveillance of congenital defects. An analysis was undertaken of the last five years of work in providing training and technical cooperation for the implementation of the audit and analysis of perinatal deaths in the Caribbean. This analysis made it possible to identify opportunities and challenges to strengthen the auditing of deaths and move towards the elimination of deaths from preventable causes in this subregion. Countries have also updated their goals on neonatal mortality with a focus on reducing inequalities.
- PAHO continues to be an active member of the Inter Agency Task Force for the reduction of maternal mortality (GTR for its acronym in Spanish). This task force is constituted by UNFPA, UNICEF, USAID, MCSP, FIGO/FLASOG, ICM and other members. New activities were added to traditional tasks this year to help improve the response to the pandemic for OB / GYNs, nurses and midwives, and other stakeholders. PAHO has also maintained active participation in the Maternal and Perinatal Death Surveillance and Response Technical Working Group, which is integrated by WHO, UNFPA, UNICEF, USAID, MCSP, CDC and others. PAHO currently leads the sub-working group on capacity building and mentorship.
- During Year Y4, HSS produced a report on the range of access barriers indicators for which data can be derived from household surveys in the Americas, as well as results from in-depth secondary data analyses exploring the selected indicators in 26 countries, disaggregated by wealth quintiles. The results were published as three peer-reviewed articles in the Pan American Journal of Public Health (PAJPH).
- HSS and EWEC-LAC colleagues have been working to develop a joint methodology for the analysis of inequalities and barriers to access health services and the identification of policy options to address these obstacles. The methodology includes 4 modules: 1) conceptual module, 2) quantitative assessment of barriers, 3) qualitative approaches, and 4) policy options. To date, drafts for Modules 1, 2, and 4 have been produced. Work plans outlining the methodology for interviews and workshops to

identify policy options to address access barriers were also developed for Peru and Paraguay. This information has been shared with both Ministries of Health.

COVID-19 related

- The EWEC-LAC movement developed and distributed a note to ensure the continuity in the provision of essential sexual, reproductive, maternal, neonatal, child, and adolescent health services across LAC. The formal note was sent out to Member States on May 15, 2020. It included a proposal with a series of recommended strategic areas for the Ministries of Health to take into consideration during the COVID-19 pandemic in relation to women, children and adolescents, including vulnerable populations. https://www.everywomaneverychild-lac.org/e/wp-content/uploads/2020/05/Ensuring-essential-health-services-during-COVID-19_EWEC-LAC.pdf
- While it has been a challenge to maintain maternal health activities on the agendas of ministries of health, due to the work burden imposed by COVID-19, ongoing monitoring of maternal deaths which has been supported under the USAID-PAHO umbrella, led to the observation of a recent excess of reported cases of maternal mortality and an [epidemiological alert that was issued by PAHO in August](#), “COVID-19 during pregnancy”.
- An infographic on the methodology to monitor maternal health indicators and measure the social inequities during and after COVID-19 was also produced. In collaboration with CLAP, the MMWG developed an infographic focused on “pregnant women's health during and after the COVID-19 pandemic—methodological recommendations for monitoring maternal health indicators and their inequalities”. <https://www.everywomaneverychild-lac.org/e/methodology-to-monitor-health-indicators-in-pregnant-women-and-social-inequalities-during-covid-19-pandemic/>
- A series of COVID-related webinars were also produced:
 - EWEC-LAC and EIH jointly organized a virtual seminar “COVID-19, SDG-health related targets, and Equity”: The impact of the COVID-19 pandemic on social inequities in health and the promise of “leaving no one behind”.
 - A webinar on adolescent pregnancy in the time of COVID-19. This was implemented by PAHO (EWEC-LAC) and UNFPA and drew more than 1,000 participants
- A review of available published evidence on the barriers related to implementation of socially accountable education and interprofessional practice at the first level of care (with added focus on the role of resilience under disasters and emergencies, considering COVID-19) is currently under peer review. A final report will be available during 2021.

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

Strategic Line I: Promote the measurement and documentation of social inequities in health of women, children and adolescents, including identifying who is being left behind and why

- A technical document, coordinated by CLAP, consolidating national goals for neonatal mortality, including measures of inequity is in the final stages of review.
- The self-administered virtual course on Maternal Perinatal Death Surveillance and Response was uploaded onto PAHO’s Virtual Campus for Public Health in both English and Spanish in late 2019. Since this time, more than 11,000 participants from 74 countries around the world have taken the course. The success of this course has underlined the value and utility of high-quality virtual courses, in both emergency situations and under normal conditions.
- A final version of the Standardized Guidelines for the Surveillance of Maternal Near Miss (MNM) for the Americas, was reviewed by the Experts Working Group and was sent (in Spanish and English) to all the

ministries of health in Latin America and the Caribbean. Professionals from countries have until October 15 to send their comments to PAHO for final consolidation. Once countries' suggestions are received, they will be consolidated and the countries will be invited to discuss the final version of the document, in two sub-regional meetings, one in Spanish and other one in English, both in November.

- In 2020, three peer-reviewed articles were approved for publication in the Pan American Journal of Public Health, which present tracer indicators, methodologies and baseline results to monitor the population that experience health needs but fail to seek and obtain appropriate health services (see Section 4, Reduction of Health Inequities-related products, #11-13). This activity allowed PAHO to determine that it is indeed possible to measure quantitative indicators of inequalities in access barriers to health services using available data obtained from household surveys in the Americas. Second, it helped to identify the indicators that can be used to measure barriers, which include barriers to forgone care, delayed care and dissatisfaction with care. The next step is to build on these findings by working with EWEC-LAC to fine tune methodologies to measure inequalities for these indicators and create a virtual course. The objective of the virtual course will be to advocate for the use of these methodologies and to build capacity in countries for monitoring inequalities in barriers to accessing health services.
- By the beginning of 2020, HSS had generated agreements, a preliminary agenda and work plans for conducting key informant interviews and focus groups in the four countries prioritized in the USAID-PAHO Umbrella Grant. However, it was not possible to travel to countries and hold in-person interviews due to COVID-19 related restrictions. To address these challenges, country-specific reports are being produced based on quantitative data and qualitative data collected through virtual interviews with PAHO's focal points in the countries.

Strategic Line II: Promote the identification and analysis of supply-side bottlenecks and demand-side barriers to effective universal access and coverage of health.

- A data extraction tool and template for assessing quality of newborn care and outcomes by strengthening data collection, monitoring and evaluation of key indicators related to prevalent conditions and quality of care has been developed. The tool is expected to be used at health facilities providing care to newborns (mainly Neonatal Intensive Care Units). Likewise, the modular development of the Assessment of Essential Conditions tool in neonatal care units was completed.
- The systematic review document "[Main barriers that affect the surveillance and response to Maternal Near Miss in selected countries of the Americas](#)" was completed. This document identifies the main bottlenecks for the implementation of a national surveillance system for MNM in six of the 10 countries with the highest maternal mortality in the LAC region. But it also analyzes the successful experiences of two other countries in the region. The document is currently available in Spanish.

Strategic Line III: Ensure the identification and promotion of practical solutions to reach those being left behind, addressing social inequities in health.

- A regional mapping and equity-based review of policies and programs affecting the health of women, children and adolescents was drafted, and is currently being reviewed for finalization.
- A compendium of tools, instruments and methods to identify and address health inequalities affecting women, children and adolescents is also in development and which contains resources that have been created by global, regional and country partners over the years to conduct systematic equity-based analysis and/or re-design of health systems, programs, strategies and interventions.
- Technical support continued to be provided to countries to support the use of specific equity-based tools, instruments, and methods (such as Innov8 and AHSBA).

- The Region has produced successful initiatives to increase health equity that can serve as important examples and best practices to be adapted and replicated by other countries. To help identify such impactful interventions, EWEC-LAC finalized a “competition of good practices” to seek out interventions that have proven to be effective in promoting health equity for women, children and/or adolescents in the Region.
- A systematic review of equity-based approaches towards maternal health and adolescent pregnancy was finalized and is currently in the review process within PSIWG.
- A methodology was also developed for the simultaneous formulation of quantitative targets for the improvement in the national average of an indicator and the reduction of inequality. A scientific paper with the methodology was just accepted for publication.
- The technical document [Present and Future of Birth Defects Surveillance in the Americas](#) was finalized. In addition, other documents were completed that represent essential outcomes for neonatal health in the region and that have been developed within the framework of the present and previous umbrella grants; this includes the development of the [Evidence-based Clinical Guidelines for the Follow-up of Preterm and Ill Newborns](#). These guidelines are the result of more than two years of work of a group of experts and they are a substantial contribution to the provision of quality care in the follow-up of newborns who are premature, small or who have conditions that expose them to significant risks.
- Likewise, the draft document “Mapping of the evidence of diagnostic utility, safety, and cost effectiveness of newborn screening of neurodevelopment and other structural disorders” was completed. The information in this document is extremely relevant to advance technical cooperation with countries for the formulation of policies, plans and programs aimed at screening conditions that significantly affect the health and quality of life of newborns and that impact the course of life.
- CLAP also finalized a review of the experiences on implementing neonatal deaths and stillbirth analysis and review in selected countries in the Eastern Caribbean.
- Capacity building activities for the improvement of maternal quality care in selected health facilities of the CLAP network were maintained throughout Year 4. However, the main request from hospitals within the CLAP network was to receive updates on COVID-19 and pregnancy. The interruption of the continuity of services caused a deterioration in many of the indicators that were measured (reduction of antenatal care contacts, reduction of companion of choice during antenatal care visits and during childbirth, and others). In the case of Dominican Republic, Los Minas Hospital was transformed in a “COVID-19 hospital”; in this particular case there was also a reduction in the number of institutional deliveries, since they just accept COVID-19 positive pregnant women.
- The Virtual Course on Evaluation in the framework of Competency Based Education (CBE) was finished and will be uploaded into PAHO Virtual Campus Platform by the end of October 2020. The Virtual Course incorporating Respectful Maternity and Neonatal Care is being developed. This course is designed in three modules and one of the modules is currently available, however the complete course content should be finalized by the first week of December.
- The pilot of a self-learning basic course on Interprofessional Education (IPE) was completed with 50 participants and five tutors (versions in Spanish and Portuguese). The course is now open for public use at PAHO’s Virtual Campus of Public Health. <https://mooc.campusvirtualesp.org/course/view.php?id=122>
- A regional workshop on transforming health professions education was held in Albuquerque-USA on 20-22 November 2019 at the University of New Mexico (a PAHO/WHO collaborating center). The aim was to share good practices and promote cooperation between countries in the Americas on three topics: 1) accreditation for socially accountable and interprofessional education; 2) faculty development and social determinants of health; 3) capabilities of interprofessional teams for the first level of care. Policy briefs on these topics are now under peer review and shall be circulated during 2021 as part final products of the project.

- Extensive participation was supported at the global virtual conference TUFH 2020: Primary Health Care: A path towards social justice (September 22-25, 2020). Experiences and good practices developed during this project from several countries of the region were presented covering the following topics: transformation of health professions education, development of interprofessional teams for primary care and tools to monitor the social mission and interprofessional scope of academic institutions. <https://tufh2020.com/>

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

- Despite the efforts by all technical teams involved to continue all activities as planned, the COVID-19 situation in LAC limited activities planned at the country level and delayed the timeline for many deliverables. Activities that required field work and extensive travel, such as in-person workshops, were particularly affected.
- Within the area of newborn health, the most important achievements made this year refer to the development of instruments to improve the quality of newborn care and monitoring, related to sustaining neonatal essential care and interventions. The countries of the region have valued the instruments and material developed to address conditions that affect mortality and early morbidity, such as congenital defects or other conditions. In the context of the pandemic, the instruments developed within the framework of the project have been presented in virtual sessions and have been applied to sustain essential care for healthy newborns and particularly premature and seriously ill newborns. It has been possible to increase the number of countries that have a registry of surveillance of congenital defects. The analysis of the experience of five years of work, providing training and technical cooperation for the implementation of the audit and analysis of perinatal deaths in the Caribbean constitutes a substantive contribution for this subregion. The analysis has made it possible to identify opportunities and at the same time challenges to strengthen the auditing of deaths and move towards the elimination of deaths from preventable causes. Finally, the implementation of activities aimed at providing innovative answers, based on the use of information and communication technologies or contribution to implement surveillance, monitoring and evaluation at country and health facilities level has been highly valued by PAHO Member States.
- Maintaining direct contact with the hospitals in the CLAP Network allowed professionals to receive high-quality information, which contributed to the development of national care protocols in the countries of the Network. This was especially important since almost all scientific publications are written in English and therefore not read by many professionals due to a language barrier.
- CLAP is also observing how prior years' skills-based education interventions aimed at midwifery teachers are now bearing fruit. The teachers initially trained in the various "train the trainers-ToT" developed in previous years within the USAID umbrella work plan have become independent and continue training only with local resources.
- Finally, in special situations, such as this pandemic, the usefulness of virtual courses has been highlighted. Many courses have reached a far greater audience than anticipated; while they do not replace face-to-face contacts, but they are an invaluable tool.
- Regarding lessons learned -unavoidable on the context of the COVID-19- a fundamental conclusion is that "a transformative health workforce education agenda is a means to an end, not an end in itself". Changes in health workforce education and training for the social determinants of health will need to go beyond improving curricula and individual programs. In order to strengthen and transform the health workforce education and training -with a view to better responding to the health needs of people and to tackle health inequities in our Region-, three main lines of action are needed: a) promotion of interprofessional, community-based and health systems-based education, b) linkages of pre-service education to continuous

professional development, and c) a socially accountable accreditation system to ensure quality of training institutes and competency of health workforces.

- One of the main challenges moving forward will be the health and economic impact of COVID-19, which is likely to generate even greater inequities and worsening health conditions in LAC, eroding the gains of years' past and requiring a renewed technical and financial push to get the region back on track.

Topic 7: Health Information Systems

Governments require strong information systems for health that provide the data and evidence for formulating sound policies and decisions. The Americas has achieved significant improvements in this area; mortality underreporting has decreased from 5.8% in 2008 to 5.1% in 2018, and the coverage and quality of mortality and live births data have improved. Nevertheless, challenges persist to address fragmented information systems, limited analytical capacities, data quality challenges, among others which hinder access to quality data. PAHO's Member States recognize this urgent area of work, particularly given the need to produce disaggregated, subnational-level data to measure the SDGs as the Americas shift towards reaching universal health coverage. Goal 6 of PAHO's Sustainable Health Agenda for the Americas 2018-2030 sets targets for strengthening countries' information systems for health (IS4H). IS4H serves as the framework for the 2017-2022 Plan of Action for Strengthening Vital Statistics (document CSP29/9). USAID support through the umbrella agreement allows PAHO to obtain countries' buy-in, conduct assessments and missions, and produce guidelines, model policies, and procedures. The Latin American and Caribbean Network for Strengthening Health Information Systems (RELAC SIS) draws from regional expertise and excellence to facilitate the dissemination of practices and success stories and provides health personnel with access to free-of-charge trainings and forums.

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

- The 29 Information Systems for Health (IS4H) maturity assessments which PAHO conducted are critical inputs that countries are currently using to develop roadmaps to support and contribute to the implementation of countries' IS4H and digital health initiatives plans and strategies, supported by targeted recommendations and continuous guidance from PAHO. Results to date show the need to continue working on strengthening health information systems and moving towards digitalization. In recognition of the value of these assessments, the Inter-American Development Bank now deems this evaluation as a precondition for loans for information systems for health and uses its findings to guide investments. To date, IDB loans for information systems and digital access across the Americas sum to approximately \$110 million.
- The 20 new tools on readiness for digital health and human resources competencies and the 19 vital statistics recommendations and guidance have been invaluable for national authorities to identify key opportunity areas and gaps that will drive future investments and capacity building.
- The 19 country assessments of vital statistics systems have provided countries with important baseline information on where to focus efforts to investments and capacity building to improve the quality and coverage of vital statistics. Recommendations were given to each country through the assessment reports to lead the next steps for its systems and certificates improvement, specifically regarding data quality.
- PAHO's factsheets on IS4H and digital health in the COVID-19 pandemic have been widely disseminated within the Region. Governments have increasingly recognized the value of quality data to respond to the pandemic.

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

- PAHO's IS4H evaluation framework considers data management and information technologies, management and governance, knowledge management and sharing, and innovation areas. This has been key to determine each country's situation regarding its information systems, the technologies, standards, and methodologies that they use.
- After conducting a desk review for each country's information system, PAHO has now applied its IS4H maturity assessment tool to 29 countries. PAHO developed 20 new tools to help countries and institutions in the Americas to assess their readiness for digital health and human resources competencies, as well as 19 vital statistics recommendations and guidance.
- PAHO developed a module to assess vital statistics systems, which has now been applied to nineteen countries (Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras, Haiti, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay, and Venezuela)¹. Additionally, PAHO analyzed the death certificates used across the Americas to provide recommendations to capture the required information for subsequent analysis of mortality causes disaggregated by different stratifiers. PAHO developed self-learning resources which have been disseminated through PAHO's Virtual Campus for Public Health.
- In response to the ongoing COVID-19 pandemic, PAHO produced 12 factsheets to provide health authorities with considerations and recommendations for ensuring that their information systems and analytical capacities can provide decision makers with the needed data.
- Lastly, the implementation of the 2019-2020 RELACSIS work plan was partially achieved. As new materials were produced, they were disseminated through the RELACSIS website and other resources used by this network. Certain activities were postponed given reductions in the availability of USAID resources.

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

- The current situation derived from the COVID-19 pandemic has put all countries and their information systems for health to the test. This public health crisis has confirmed the need to continue working on strengthening health information systems and moving towards digitalization, a key component of digital transformation. It also has underscored the need for robust information systems that can rapidly transmit timely and quality data to help guide country responses, as well as the inclusion of telemedicine, which has been an area that PAHO has been working on with the countries. Vital statistics data will prove essential to ensuring that epidemiological analysis have a baseline and to enable monitoring mortality trends considering incomplete testing at all levels.
- This COVID-19 situation has also unfortunately stressed available resources needed to make appropriate, sustainable investments in countries' information systems for health. PAHO has continued to deliver essential technical cooperation during this time and will work with country counterparts to tailor this assistance to critical needs amidst this crisis. As in other areas, PAHO's ministry of health counterparts have been redirected towards national responses to COVID-19. As such, country and subnational assessments of IS4H have continued but at a different pace and 100% virtually.
- Nevertheless, the virtual approach for technical cooperation developed within the framework of RELACSIS and now incorporated into IS4H technical cooperation has prepared PAHO to continue working with country counterparts despite grounded flights across the Americas. Similarly, the experience of building partnerships with institutions and PAHO/WHO collaborating centers has enabled PAHO to provide direct country support in areas outside the scope of the Organization's in-house expertise.

¹ PAHO used its own internal resources to provide technical support to Bolivia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Haiti, Mexico, Nicaragua, and Venezuela.

2. Inter-programmatic Efforts

Most topics under the USAID Umbrella grant utilized an inter-programmatic approach to advance towards their objectives. A few examples of these efforts are highlighted below:

- Joint work in TB has been carried out with other PAHO programs addressing the health of vulnerable populations, including HIV, child and adolescent health, health systems, strategic information, non-communicable diseases, gender and ethnicity, and PAHO's Strategic Fund.
- Work with partners like the TB Parliamentary Caucus, civil society, PAHO/WHO collaborating centers, academic and research institutions, scientific societies, NGOs, have further facilitated the implementation of the USAID TB workplan activities.
- The malaria team has been working with PAHO's Department of Evidence and Health Information (EIH)² to support and improve data quality and information systems in countries. The Maturity Model is being implemented in Suriname by EIH and within that framework, the malaria team is working with the National Malaria Program to implement a DHIS-2 based health information system, currently being piloted for malaria. Similar efforts are underway in Guyana.
- Additionally, the malaria team has been working with the Health Systems and Services (HSS) Department in two specific areas: 1. Implementing pilot interventions to improve treatment adherence and pharmacovigilance, and 2. Supporting better demand planning of malaria commodities (drugs, diagnostic tools, and vector control tools, among others).
- At the beginning of Year 4, important advances were made with the Climate Change and Environmental Determinants of Health Unit at PAHO to develop an approach on habitat modification in malaria control with an initial experience in the Dominican Republic, which had to be interrupted due to COVID-19.
- Throughout the USAID umbrella grant inter-programmatic work has always occurred, but this approach was more clearly articulated and strengthened in Year 4, with the development of the integrated Health Inequities Workplan.
 - Staff based at CLAP and EWEC-LAC have collaborated in the analysis of inequalities and in the development of training tools. This has included assessments in Caribbean countries of the results of perinatal mortality surveillance together with maternal mortality and Near Miss, within the framework of the MPDSR approach. Likewise, joint work has been carried out on the development of the Respectful Maternity and Newborn Care (RMC) course. CLAP staff have also worked jointly with HSS staff in the development of the ECV instrument.
 - Work to advance the surveillance of maternal mortality and morbidity required an inter-programmatic approach together with EIH staff (Unit of Health Analysis).
 - HSS, in collaboration with EWEC-LAC colleagues, has begun developing a joint methodology for the analysis of inequalities and access barriers to health services as well as the identification of policy options to address these obstacles. The work agenda has been defined through biweekly meetings involving professionals from both programs. The overarching objective has also been to identify opportunities to align technical cooperation strategies related to the assessment of inequalities, barriers to access and maternal, child and adolescent health programs.
- Information systems are critical for a country's health system to ensure that the needed health information is available for different essential services and disease programs to function effectively and adapt as needed to changing situations. To guide the region's efforts towards ensuring that information systems produce quality and timely disaggregated data down to the subnational level, for both vital statistics and other health information, multiple inter-programmatic assessment missions have been

² The EIH Department also carries out the USAID umbrella funded workplan on Health Information Systems (Topic 7). Other technical units within the Health Systems and Services (HSS) Department have activities within the USAID umbrella funded workplan on Health Inequities (Topic 8 in years 1-3).

carried out (outside the scope of this umbrella), which have allowed PAHO to refine its IS4H maturity assessment tool and develop other tools. These inter-programmatic approaches, which included collaboration with PAHO's programs for health systems and services and non-communicable diseases team, and mental health, will be followed when conducting future assessments as needed, as well as follow-up missions to countries that have already received recommendations.

- Inter-programmatic efforts have also been essential to strengthen IS4H capacities through developing online courses, focusing on topics pertaining to open data, and promoting interoperability, while continuing to apply assessments of country capacities for utilizing vital and health statistics, improving the quality and timeliness of produced data, and prioritizing the need for subnational data. This includes the region's reorientation away from relying on national averages towards reducing existing gaps for indicators between different social groups (by sex, age, place of residence, education, economic capacity, ethnicity, and other social and demographic characteristics).
- COVID-19 resulted in unexpected coordination across all topic areas with the Department of Public Health Emergencies (PHE) and the Incident Management Support Team (IMST) at PAHO.

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 4 (September 2020).

Topic		Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2021	Proposed annual target FY2019	Results as of September 2020 and Comments
1	TB	TB treatment coverage. 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. Baseline: 81%	≥90%	2% increase	81% (2018 latest available information)
		Documentation of HIV status among TB patients. 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. Baseline: 74%	≥95%	4% increase	82% (2018 latest available information)
		Number of international policies, guidelines, and research studies in TB diagnosis, treatment, and prevention published with support from USAID ³ . Baseline: N/A	N/A	N/A	With grant resources translation of WHO TB guidelines was possible.
		Number of countries introducing TB diagnosis and treatment interventions with USAID support ⁴ . Baseline: N/A	N/A	N/A	New drugs and diagnostics have been introduced in countries of the region, funded with national and Global Fund resources.

³ 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.

⁴ 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.

Topic	Indicators				
	Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2021	Proposed annual target FY2019	Results as of September 2020 and Comments	
2	Malaria	Percent reduction in malaria morbidity compared with 2015 official figures Baseline: 451,244	≥40%	16% reduction	722,922 cases (in 19 countries), 60% increase since 2015 – largely due to the malaria situation in Venezuela. Six countries have achieved the 2020 target, one country is on track but had an increase in 2020 (Haiti), and there is an increase in cases in the other countries.
		Number of malaria-endemic countries with no stock-outs of key anti-malarials at the national level in a given year ⁵ Baseline: 19 countries	21 countries ⁶	21 countries ⁶	21 malaria-endemic countries had no stock-outs. 5 countries experienced risk of stock-outs of antimalarials. The situation was mitigated with the support of the PAHO CDE/VT regional warehouse.
		Number of countries implementing strategies to address malaria among populations in situations of vulnerability Baseline: 10 countries	18 countries ⁷	12 countries	12 countries developed specific actions to address malaria in indigenous populations, migrant workers, and miners. Three of these countries are not supported by the USAID agreement.
		Number of artemisinin-based combination therapy (ACT) treatments purchased with USG funds Baseline: N/A	N/A ⁸	N/A	30,000 treatments of ARTEMETHER 20MG + LUMEFANTRINE 120MG (ACT) purchased and delivered to the CDE/VT Regional Warehouse on 25 May 2020.
		Number of malaria rapid diagnostic tests (RDTs) purchased with USG funds Baseline: N/A	N/A	N/A	70,000 RDTs procured for Venezuela and delivered to the country on 1 September 2020.

⁵ ARG & PRY included as baseline for endemic countries in 2015, both countries were certified malaria free in 2018 and 2019 respectively.

⁶ From the 21 endemic countries PAHO will support five countries (ARG, BOL, FGUI, PRY and VEN) because these countries cannot benefit from USAID funds.

⁷ ARG, PRY and HTI are excluded from this indicator

⁸ 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.

3	Neglected Infectious Diseases	<p>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)</p> <p>Baseline: 9 countries</p>	15 countries	2 countries	Currently 15 countries meet this indicator: ARG, BRA, BOL, COL, CUB, DOM, GTM, GUY, HTI, HND, MEX, NIC, PRY, SLV, STL, VEN
		<p>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.</p> <p><i>For onchocerciasis:</i> Baseline: 3 countries</p> <p><i>For lymphatic filariasis:</i> Baseline: 3 countries</p> <p><i>For blinding trachoma:</i> Baseline: 0</p>	<p><i>Oncho:</i> 6 countries</p> <p><i>LF:</i> 6 countries</p> <p><i>Blinding trachoma:</i> 4 countries</p>	<p>Oncho: 4 countries</p> <p>LF: 1 country</p> <p>Trachoma: 1 country</p>	<p>Four countries, Colombia, Ecuador, Guatemala and Mexico, maintained their status as countries that eliminated onchocerciasis. Considerable progress has been achieved in Brazil and Venezuela, but elimination by 2021 seems unlikely.</p> <p>LF: Brazil is close to achieving validation of elimination of LF as a public health as early as 2021. The last TAS 3 was postponed for 2021 because of the COVID-19 pandemic. Dominican Republic could be validated in 2022 or 2023,</p> <p>Trachoma: Mexico maintains its status as a country where validation of elimination of trachoma was achieved.</p>

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 2021	Proposed annual target FY2019	Results as of September 2020 and Comments	Related activity in Excel workplan
4-6, 8 (Originally)	Inequities	Number of lead midwifery/nursing teachers trained in CBE framework Baseline: TBD	60	10	14 (5 Argentina, 4 Uruguay, 2 Saint Lucia, 2 Saint Vincent, 1 Grenada). These trainings were dictated by the midwifery schools themselves and did not require funding. All trainings were carried out between Oct 2019 and March 2020.	Section III #6
		Number of new professionals (universities, midwives, MoH) trained in evaluation models) Baseline: 0	100	20	14 (5 Argentina, 4 Uruguay, 2 Saint Lucia, 2 Saint Vincent, 1 Grenada). These trainings were dictated by the midwifery schools themselves and did not require funding. All trainings were carried out between Oct 2019 and March 2020.	Section III #6
		Number of countries where MCPS Manual 2nd edition is adopted as an educational instrument Baseline: 0	16	4	Eight new countries adopted the use and dissemination of MCPS Manual 2 nd edition. (Argentina, Chile, Costa Rica, Guatemala, Dominican Republic, Guatemala, Guyana and Uruguay) The process of adoption of MCPS manual is an active process that will continue in an automatic way.	Section III #6
		N° of countries with updated goals on newborn and fetal mortality in alignment with Every Woman, Every Child, Every Adolescent global strategy and the Every Newborn Action Plan (ENAP) Baseline: 3	10	7	8 (ARG, COL, DOR, ECU, GUT, HND, PAR, URU)	Section I #1
		N° of countries collecting quality data on fetal and newborn health Baseline: 12	17	16	17 (ARG, BRA, COL, COR, DOM, DOR, ECU, SLV, GUT,	Section I #3

					GUY, HND, PAN, PAR, PER, STK, TRT, URU	
	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. Baseline: 7 countries	22 countries	3		Eight countries in Central America and the Dominican Republic plus two countries in South America (Bolivia y Paraguay)	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 Baseline: 0 countries	15 countries	3		Adolescent health plans and adolescent pregnancy prevention plans using AAHA & INNOV8: (12 countries) There are countries that are in the process of doing this in the context of monitoring SDG3, including Argentina, Colombia, the Dominican Republic and Paraguay	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 Baseline: 10 countries	22 countries	7		Three countries in South America (Argentina, Bolivia, Paraguay). Training was considered in the Caribbean countries, but due to the pandemic it has not been possible	Section 1 #7
	Number of countries that have developed informational materials related to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) inequalities and officially communicated these with national policy and decision makers Baseline: 7 countries	22 countries	7		Two countries in South America (Bolivia y Paraguay)	Section III #12 and #16
	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 Baseline: 0 countries	15 countries	7		No advances were made with this activity this year due to COVID-19	Section III #13 and #14
	Ratio of USAID funding to other dollars leveraged towards partnership goals Baseline: N/A	N/A	N/A		No quantitative data is currently available.	Section III #17

		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 Baseline: 4	15	2	Two countries. In 2019, PAHO's framework for monitoring and evaluation was successfully implemented during health system reform assessment in Belize and Guyana.	Section I #6, Section II #5, Section III #9
		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 Baseline: 11	18	2	Achieved. Due to the Covid-19 pandemic many countries in the Region needed to develop and implement HRH plans towards universal health. Countries in the Caribbean should be acknowledged and particularly Jamaica and Trinidad and Tobago, with relation to this project.	Section II #6, Section III #10, #11

Topic		Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	Proposed target 2021	Proposed annual target FY2019	Results as of September 2020 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) Baseline: 13 countries (2016)	29	29	All countries and territories in the Americas now form part of 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 Baseline: 0	29	29	PAHO has now conducted IS4H assessments on 29 countries, although validation is pending for some countries.
		Ratio of USAID funding to other dollars leveraged towards partnership goals Baseline: N/A	N/A	N/A	In 2019, PAHO issued US\$1.5 million in grants to country partners to implement projects that apply PAHO's technical recommendations, standards, and other tools for strengthening information systems for health (IS4H). Additionally, PAHO's partners have invested time and personnel resources to support PAHO's technical cooperation to countries in the Americas. Partners: University of Illinois, Hospital Italiano de Buenos Aires, Universitat Oberta de Catalunya, Mexico's CENETEC and CEMECE, Argentina's CACE, Brazil's University Network of Telemedicine (RUTE), Harvard University, and the Inter-American Development Bank.

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 were shared electronically. Otherwise, materials are also available upon request.

Tuberculosis-related products:

1. World TB Day commemoration materials and video:
<https://www.paho.org/en/campaigns/world-tuberculosis-day-2020>
<https://youtu.be/phmH4aLu7Ck>
2. Translation to Spanish on Information notes, recommendations, and infographics on TB and COVID:
<https://www.paho.org/es/documentos/nota-informativa-tuberculosis-covid-19-marzo-2020>
<https://www.paho.org/es/documentos/nota-informativa-tuberculosis-covid-19>
3. Infographics and gifs for social media on TB and COVID:
<https://www.paho.org/en/documents/infographic-tuberculosis-and-covid-19-what-you-need-know>
<https://www.paho.org/en/documents/social-media-how-prevent-covid-19-and-stay-healthy-if-you-have-tb-gif>
<https://www.paho.org/en/documents/social-media-tuberculosis-tb-and-covid-19-what-you-need-know-gif>
4. Regional TB Report 2019 (Spanish version):
<https://www.paho.org/es/documentos/tuberculosis-americas-informe-regional-2019>

Malaria-related products:

1. Malaria tracker for the Americas - <https://bit.ly/Malaria2020>
2. Colombia national case management guidelines available at:
<https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/PP/ET/gpc-malaria-version-publicacion1.0.pdf>
3. Participation of 24 laboratories in the External Quality Assessment Program (EQAP) during the 7th Round. Report available in the following link: <https://www.paho.org/en/documents/technical-report-seventh-round-2018-2019>
4. Epidemiological update: Malaria in the Americas in the context of COVID-19 pandemic (10 June 2020)
<https://www.paho.org/en/documents/epidemiological-update-malaria-10-june-2020>
5. PAHO supports malaria elimination efforts in the Region by addressing potential disruptions of key antimalarial supplies
<https://www.paho.org/en/news/25-6-2020-paho-supports-malaria-elimination-efforts-region-addressing-potential-disruptions>
6. Measures to ensure the continuity of the response to malaria in the Americas during the COVID-19 pandemic (24 April 2020)
<https://iris.paho.org/handle/10665.2/52080>
7. Brazil pharmacovigilance and treatment adherence pilot intervention: preliminary results, September 2020. (PDF)
8. Toolbox to guide decisions in vector control for malaria. (PDF)
Includes:
 - Strategic analysis for decision making and development of the malaria vector control component at country level
 - Selection of vector control interventions
 - Insecticide resistance management strategies for different insecticide resistance scenarios in malaria endemic countries in the Americas

- General guidance on Entomological Surveillance in Malaria
 - Compendium for the implementation of LLINs
9. Guide: Verification of absence or under-reporting of indigenous malaria transmission. (PDF)
 10. Plan of Action for Malaria Elimination 2021-2025. Draft one. (PDF)
 11. Gestión de focos. Coordinación de la operación del DTI-R en los focos. Acciones de soporte y supervisión del DTI-R en los focos. Documento de trabajo, versión 1. Desarrollado por el Equipo Regional de Malaria de la OPS. (PDF)
 12. Strategic approach to guide decisions on *P. vivax* radical cure policies in the Americas. Draft zero. (PDF)

NIDs-related products:

1. Report of the Meeting “An integrated approach to Trachoma, other Neglected Infectious Diseases and Eye Diseases that can cause blindness in Remote Amazon Populations.” Panama City, 21-22 October 2019. Available at: <https://iris.paho.org/handle/10665.2/52508>
<https://www.paho.org/es/documentos/abordaje-integrado-tracoma-otras-enfermedades-infecciosas-desatendidas-enfermedades>
<https://www.paho.org/en/documents/integrated-approach-trachoma-other-neglected-infectious-diseases-and-eye-diseases-can>
<https://www.paho.org/pt/documentos/abordaje-integrado-tracoma-otras-enfermedades-infecciosas-desatendidas-enfermedades>
2. Online courses on NID: The online courses on “Prevention, treatment and control of Soil-Transmitted Helminths”, in Spanish and English, and on “Schistosomiasis in the Americas, Multidisciplinary aspects”, in Portuguese, were maintained and are available at:
 STH in Spanish:
<https://www.campusvirtualesp.org/es/curso/curso-virtual-geohelminthiasis-prevencion-tratamiento-y-control>
 STH in English
<https://www.campusvirtualesp.org/en/course/soil-transmitted-helminthiasis-prevention-treatment-and-control-2019>
 Schistosomiasis (Portuguese):
<https://www.campusvirtualesp.org/pt-br/curso/esquistossomose-nas-americas-aspectos-multidisciplinares>

Reduction of Health Inequities-related products:

1. EWEC-LAC is developing an E-Learning Course on Measurement, Analysis and Monitoring of Social Inequalities in Health, with emphasis on Women's, Child, and Adolescent Health
2. Article published at the PAHO journal: Health and social inequalities in maternal and child health in Paraguay <https://www.paho.org/journal/en/articles/health-and-social-inequalities-maternal-and-child-health-paraguay>
3. America and the Caribbean battle up against inequalities in health:
<https://www.everywomaneverychild-lac.org/e/latin-america-and-the-caribbean-face-social-inequalities-in-health-in-the-region/>
4. Webinar Series on COVI-19—SDG Targets on Health and Equity organized by PAHO's EIH/HA Department. The joint, organized seminar by EIH/HA (PAHO) and EWEC-LAC is titled “*Impact of the pandemic by COVID-19 on social inequalities and the promise of ‘leaving no one behind’*” that will take place on 19 August 2020. The topics that will be covered in this Seminar include social and economic inequalities that affect the fulfillment of the 2030 targets agenda; and health inequalities that will

impact the fulfillment of the SDG goals.

<https://www.youtube.com/watch?v=9Wh6lxEkXjM&fbclid=IwAR2LaLolm00tdiMzR88vyBPPluBUYeDYbqizjamhtgMeNQadT5m-fXfiJdc>

5. Technical document: Present and Future of Birth Defects Surveillance in the Americas
<https://iris.paho.org/handle/10665.2/51899>
6. Evidence-based clinical guideline guide for the follow-up of preterm and ill newborns
https://iris.paho.org/bitstream/handle/10665.2/52903/OPSFPLCLP200017_spa.pdf?sequence=4&isAllowed=y
7. Automatic reports on perinatal outcomes, quality of care, conditions at discharge and inequities in selected variables:
 - a. http://www.sipplus.org/reportes/1-Resultados_Perinatales.pdf
 - b. http://www.sipplus.org/reportes/2-Calidad_Atencion.pdf
 - c. http://www.sipplus.org/reportes/3-Condiciones_Egreso.pdf
 - d. http://www.sipplus.org/reportes/4-Analisis_Desigualdades.pdf
8. Maternal Perinatal Death Surveillance and Response Virtual Course
<https://bit.ly/CVOPsvig-mort-materna-perinatal> (Spanish version) and <https://bit.ly/PAHOVCmaternal-perinatal-death-surv> (English version)
9. Standardized guidelines for the surveillance of maternal near miss (MNM) for the Americas (Spanish and English versions)
<https://1drv.ms/u/s!AkHOpsTmplg2pst0zda-yV1gDQbd3g?e=gkwBe9>
10. Main barriers that affect the surveillance and response to Maternal Near Miss in selected countries of the Americas (Spanish version)
<https://1drv.ms/u/s!AkHOpsTmplg2pst3epyjvco3CLQYnQ?e=Pnr19o>
11. Competency-Based Assessment virtual course (English version)
<https://1drv.ms/u/s!AkHOpsTmplg2pst5DQeHPQFz63xkHA?e=GzWYv8>
12. Monitoring access barriers to health services in the Americas: a mapping of household surveys. Rev Panam Salud Publica. 2020;44:e96. <https://doi.org/10.26633/RPSP.2020.96>
13. Leveraging household survey data to measure barriers to health services access in the Americas. Rev Panam Salud Publica. 2020;44:e100. <https://doi.org/10.26633/RPSP.2020.100>
14. Socioeconomic inequalities in access barriers to seeking health services in four Latin American countries. Rev Panam Salud Publica. 2020;44:e11. <https://doi.org/10.26633/RPSP.2020.11>
15. Work plan outlining the methodology for interviews and workshops (sent separately).
16. Meeting notes and draft of joint methodology for assessing access barrier and inequalities and policy options \ produced with the EWEC-LAC colleagues (sent separately).
17. Participation at the global virtual conference TUFH 2020 "Primary Health Care: A path towards social justice" September 22-25, 2020. Topics included the transformation of health professions education, development of interprofessional teams for primary care and tools to monitor the social mission and interprofessional scope of academic institutions. Abstracts together with recording of workshops and presentations can be found at the following links
<https://tufh2020.com/>
https://tufh.org/topics/17884/media_center
https://tufh.org/topics/17884/media_center/folders/7350b1de-3711-4e6a-844c-333a334cc10c
https://tufh.org/topics/17884/media_center/folders/445bba8b-2407-445c-be10-a9ea6e67f385
https://tufh.org/topics/17884/media_center/folders/4f006862-f3bf-4a23-8672-b4a670a94015
18. Educación Interprofesional y Práctica Colaborativa en Salud (curso de autoaprendizaje en español y portugués)
<https://mooc.campusvirtualesp.org/course/view.php?id=122>

Selected publications (presenting inputs received from the project)

19. Pandemia de COVID-19 y educación médica en Latinoamérica/Covid-19 pandemic and medical education in Latin America
<https://www.educacionmedica.net/sec/verRevista.php?id=15467a1399a7517371181#>
20. Interprofessional health education networks in Latin America and the Caribbean
<https://socialinnovationsjournal.org/editions/issue-55-1/75-disruptive-innovations/2984-interprofessional-health-education-networks-in-latin-america-and-the-caribbean-situation-analysis-and-implementation-plans-in-19-countries>

Selected webinars (presenting inputs received from the project)

21. Mejores Prácticas en Educación Médica en Tiempos de Covid 19 (29 abril 2020). Available at:
<https://www.youtube.com/watch?v=jJnnnCSRHME>
22. Best Practices in Medical Education in Canada, USA and LATAM in times of Covid-19 and consequences in planned world strategies (May 27, 2020). Available at: <https://vimeo.com/424938159/846f0cfd9a>
23. Mejores Prácticas en Educación Médica en Tiempos de Covid 19, segunda parte. 2020 (citado el 1 de junio de 2020). Available at: <https://www.youtube.com/watch?v=olaDLOBaf7U&feature=youtu.be>
24. Realidades y recomendaciones para el reingreso a actividades académicas de Educación Médica en el Continente Americano y España. Perspectiva de Asociaciones Nacionales de Facultades de Medicina ante Pandemia COVID19 (30 de julio de 2020). Available at:
<https://www.youtube.com/watch?v=zFhq7yZQCpQ>
25. Importancia de la acreditación internacional en la educación médica (25 Agosto 2020) Available at:
<http://meditic.facmed.unam.mx/index.php/semretcovid/>
26. La Formación Médica en Campos Clínicos durante la Emergencia Sanitaria (22 septiembre 2020). Available at: <https://www.youtube.com/watch?v=tqXWiG-jpG0>

Health information systems-related products:

27. <http://www.paho.org/ish>
28. <https://www.paho.org/ish/index.php/en/covid-19-factsheets>
29. <https://www.paho.org/ish/index.php/en/toolkit>
30. <https://www.paho.org/ish/index.php/es/podcasts>
31. <https://www.paho.org/relacsis/index.php/en/>
32. <https://www.paho.org/relacsis/index.php/en/biblioteca-usuarios/cursos-virtuales>

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.

First Virtual International Course on TB Epidemiology and Control

An adaptation during COVID times

PAHO has been supporting The Union for the development of an international course on TB Epidemiology and Control for the past decade. This course is aimed at health professionals from Spanish-speaking countries in the region that work on TB prevention and control. The 29th version of the course was initially planned to be held in-person early in the year in Guatemala, but due to the COVID pandemic, it had to be postponed and adapted to a virtual format.

In recent years WHO has issued several updated TB guidelines based on new evidence that need to be adopted by countries and implemented by health workers. At the same time, the health workforce is constantly in flux and new professionals join the efforts for TB prevention and control. Continual capacity building and updating at all levels is therefore required. This course provides an opportunity for health professionals to gain the new knowledge.

The first virtual course was held on 21-25 September 2020. Twenty-four participants from 8 countries attended. The PAHO regional TB team supported The Union in the preparation of the sessions and funded the participation of 11 professionals using different funding sources including USAID's. The main topics addressed were epidemiological, programmatic, and clinical aspects of TB prevention and control following the latest international recommendations.

Despite concerns from the organizers on the effectiveness of a virtual course, its development and results were a success. The agenda was carried out as planned, all sessions were on time, there were no technical issues with the virtual platform used, and on-line tools were utilized to follow-up the participants' involvement. Sessions were also recorded for later review by those attending, which was a new useful feature.

This course demonstrated that given the circumstances, the traditional capacity building activity could be adapted virtually and achieve the overall learning objectives. All participants provided a very positive feedback at the conclusion of the course. This experience shows the potential for conducting similar virtual learning activities with the potential of reaching wider audiences at all levels. It is also an example for the development of near future national TB virtual courses, that provide the necessary ongoing means for capacity building in the fight against TB in a COVID and post COVID scenario.



Snapshot of closing session of the virtual TB course.

Photo credit: Guatemala National TB program.

“Thanks to PAHO’s technical and financial support, this virtual course has been possible despite the circumstances, allowing health staff to be updated with the latest evidence-based knowledge that will provide them with better elements to address TB prevention and control in the Americas”

Dr. José Caminero – Course Director

QUIBDÓ, COLOMBIA. Local analysis and approach to malaria during the pandemic

Malaria in high-burden municipalities

For many years, Quibdó has been one of the municipalities with the highest number of malaria cases in Colombia, with gold mining as one of the determinants. The municipality has been making achievements in improving malaria operations, but with the introduction of COVID-19 transmission during 2020, efforts in malaria were threatened. Despite the difficulties, the municipality has managed to maintain malaria interventions and prevent an increase in cases, while taking actions to ensure the protection of health personnel.

In 2018, the municipality of Quibdó joined the regional initiative of Municipalities for Zero Malaria, which seeks to promote effective actions in the municipalities with the highest malaria burden in the Americas. During 2019, PAHO's technical cooperation with the support of USAID has facilitated various actions to improve the malaria response in the municipality.

Some of the main improvements in the malaria response in Quibdó are:

- Identification and characterization of main malaria foci
- Promotion of key local personnel to support foci elimination by implementing the DTI-R strategy (test, treat, and track)
- Improvements in local information routines, and implementation of the use of dashboards to support local analysis and decisions based on evidence
- Increase in posts for malaria diagnosis and treatment (14)
- Increase in human resources to support epidemiological surveillance at the local level

In 2019, Quibdó reported a total of 5,860 malaria cases, with 74.3% of cases from *P. falciparum*. While COVID-19 cases started increasing in EW 15 of 2020, malaria cases showed a decrease. Some of the challenges faced were that people remained at home not seeking health care attention and malaria personnel were afraid because PPE was not available for daily operations. Despite the challenges, by week 36 of 2020, the municipality managed to maintain case detection actions at a level close to the previous year, reporting a 14.3% reduction in the number of cases.

The improvements and platform developed during the previous months to support actions at the municipality level worked during the initial wave of the pandemic and have been key to support the malaria response during the disruptions caused by the COVID-19 pandemic.

The concept of “surveillance as intervention” was established and allowed local staff to flag problems with a decrease in samples taken at the beginning of the pandemic. The following additional measures taken during COVID-19 are highlighted:

- Design of flow and local algorithm for COVID-19 included malaria detection
- Active Case Detection (ACD) was strengthened
- Number of malaria treatments and rapid diagnostic tests was increased in each COVID-19 health site to promote differential diagnosis and treatment when appropriate
- PPE was delivered allowing local personnel to resume activities
- Case reporting from rural communities was adapted
- PAHO guidelines to support malaria interventions during COVID-19 pandemic were taken into account

Improvements in the malaria response in Quibdó have also been supported by increased government funding; an important political commitment from the local and national governments; and the coordination between various local, national, and international partners.



Quibdó health personnel implementing the new procedures with suspected malaria case, both wearing PPE

Photo credit: PAHO



Dashboard with local analysis

Guyana's 1st Successful IDA/MDA Campaign - One step in the right direction - scaling up for Elimination Activities

The Guyana's Ministry of Health, in collaboration with PAHO/WHO, is committed to eliminating Lymphatic Filariasis as a public health problem.

Guyana is one of four countries in the region of the Americas where Lymphatic Filariasis (LF) caused by *Wuchereria bancrofti*, is still a major public health problem. The expressed political will of the nation is to scale up all elimination activities for LF to protect the at-risk population and reduce morbidity in the country. Following the LF remapping survey in six (6) mass drug administration (MDA) naive regions in 2018/2019, the country was able to identify eight (8) endemic regions. The survey also revealed that about 90% of the Guyanese population were at risk for LF and that there was a coastal LF distribution, where most of the socio-economic and agricultural activities take place in the nation.

To combat this, in 2019 Guyana-following the WHO recommendation-was able to scale up elimination activities even further by implementing the first round of MDA using Ivermectin, Diethylcarbamazine and Albendazole (IDA) in all eight (8) endemic regions to achieve 100% geographical coverage. Coupled with cascade training, stakeholder engagement (specifically regional ownership) and social mobilization, the country was able to successfully achieve higher than the recommended 65% epidemiological coverage.

The campaign was effectively implemented during the last quarter of 2019 (November – December) for a period of approximately 6 weeks in the eight (8) identified endemic implementation units: endemic areas in Regions 1, 2, 6 and 7, the entire Regions 3, 4, 5, & 10. The campaign targeted everyone living in the endemic areas through a mixed distribution strategy at schools, fixed points and households, with the exception of those persons less than two (2) years old, pregnant and seriously ill. The overall coverage was 75% (510,317 / 677,286). Regions 3, 4, 5 and 6, where 86% of the at risk population lives, achieved coverage rates equal or greater than 70%.

The success of the first round of IDA/MDA has proven Guyana's commitment to stopping the transmission of LF and will encourage the nation to maintain this success during the second and hopefully last round of IDA/MDA. To boost the 2nd round of implementation, especially considering COVID-19 guidelines, efforts will be geared towards improved coverage across all age groups and a distribution strategy using robust and targeted social mobilization. Additionally, efforts will be made to address the issues linked to low compliance and improve monitoring to improve coverage; morbidity management and disability prevention will also be strengthened to ultimately eliminate filaria in Guyana.



*National LF 2019 MDA Launch at Stabroek Market, Georgetown. Use of Dose Pole by Pill distributor to later administer IDA.
Photo credit: Ariana Beharry.
SbG Engage*

“Eliminating lymphatic filariasis is a national, regional and global priority,”
Hon. Volda Lawrence
Minister of Public Health
Guyana

“This MDA represents the final stage in an initiative that will see a huge reduction in the cost to society of LF – the cost of drugs, the cost of the stigma. This, for me, is priceless.”
Dr. William Adu-Krow
PAHO/WHO Representative
Guyana.

Perinatal mortality auditing and review contribute to sustainable results in Eastern Caribbean Countries

Sustained technical cooperation and national commitment have shown significant results in improving perinatal care based on the results of after implementing auditing and review processes

Neonatal mortality is the most important component of infant and under-5 mortality. Accessibility and quality of care are essential to achieve impact in reducing preventable mortality. In the Eastern Caribbean Countries (ECC), neonatal mortality varies between approximately 10 and 20 deaths per thousand live births.

Between 2014 and 2019, training and technical cooperation have been conducted to perform reviews of near miss cases, stillbirths and maternal and neonatal deaths in St. Lucia, St. Kitts and Nevis and Grenada. Virtual and on-site activities involved training national experts in performing review and auditing activities and producing technical reports with specific recommendations. In 2020, a qualitative approach was implemented to systematize the lessons learned and the level of implementation of the recommendations. All countries have made important progress towards implementing the recommendations made because of the respective Perinatal Review. These improvements involve the development of national plans and guidelines, sustained training activities, improvements in the quality of care and equipment in health facilities. St Lucia has developed a National Plan of Action for Maternal and Perinatal Health and National Norms and Guidelines for the Maternal Perinatal Program. Grenada has also developed and updated antenatal and newborn care guidelines. Saint Lucia has implemented additional training to strengthen national surveillance and data analysis. Now, extreme prematurity is monitored at monthly perinatal review meetings. Community level education has also been strengthened. Saint Kitts and Nevis has started developing an action plan for capacity building on maternal and neonatal care. Grenada has also implemented several training programs in Obstetrics and Gynecology, Neonatal Intensive Care, Neonatal Resuscitation, STABLE Neonatal Education Program, Essential care for every baby / small baby and Infection Control. Improvements and upgrades in health facilities in the countries have also occurred. The establishment of National Perinatal Death Review Committees are still pending, however there is support for the development of national audit committees.

Based on the results from the activities implemented over these years, the assessment implemented confirms that the program has the potential to have an impact in reducing stillbirth and neonatal mortality rates and the burden of disease due to specific conditions. The commitment shown at country level and the results mentioned above support this statement. The activities implemented in these countries have strengthened national capacity at community, health facilities and national levels. Countries have planned and implemented substantive activities. Further activities need to be implemented to sustain these results. This is a clear example of self-reliance as the result of technical cooperation activities that will be beneficial for the countries, their communities and mainly for newborns and their families in ECC countries.



“At OKEU(*hospital*) there is a perinatal meeting every month and....every quarter..... every quarter, and at the end of every year, information, the statistics is reviewed and umm changes are made according to what is found. Right. According to the unit itself, we do collect our statistics and present a report at the end of every month and that gives us the ability to see stuff and make changes.”

Saint Lucia Hospital nursing manager