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**MID-YEAR PROGRESS REPORT
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PAHO



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USAID-PAHO Umbrella Project Mid-term report FY2021

Main achievements, challenges, lessons learned, and products delivered during the period between October 1st 2021 and March 31st 2022

Topic 1: Tuberculosis

Tuberculosis (TB) continues to be a public health problem in the Americas. According to the latest estimates from the World Health Organization (WHO), approximately 291,000 incident cases and 27,000 deaths occurred in the region in 2020. During that year, 197,364 new and relapse TB cases were notified to PAHO/WHO by countries, leaving an estimated gap of 93,600 undiagnosed and untreated cases. The COVID-19 pandemic has reversed years of progress in providing essential TB services and reducing TB disease burden.

Eleven percent (11%) of TB cases were coinfecting with HIV and 4,007 drug resistant TB cases were reported. Twelve countries in the region are considered high burden, reporting 88% of the cases, while 16 countries had ≤ 10 cases per 100,000 population. The most vulnerable populations for TB in the region are indigenous people, persons deprived of liberty, children, and people living in the streets, among others. TB patients with comorbidities, namely HIV, diabetes mellitus, mental health disorders and addictions are also at greatest risk of complications, lost to follow-up and death.

The project interventions used during the reporting period have been framed by the End TB Strategy and the commitments of the 2018 United Nations High Level Meeting on TB. They aim to accelerate actions towards TB elimination by addressing vulnerable populations and comorbidities; using innovation and inter-programmatic and intersectoral approaches; and involving communities and civil society.

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

- Despite the ongoing COVID-19 pandemic:
 - Provision of technical support to countries using virtual formats (TB monitoring visits, workshops, trainings, and meetings).
 - Continued communication with countries, advisory groups, partners, and civil society through monthly regional virtual sessions to update and discuss the latest global and regional recommendations, and periodic individual sessions with countries to plan activities.
- Preparation, adaptation, translation and participation in related World TB Day materials and activities in coordination with WHO.
- Follow up and support to countries in the adoption of the Multisectoral Accountability Framework (MAF-TB) to accelerate the implementation of the End TB Strategy and the commitments of the UN High Level Meeting on TB.
- Development, finalization and/or translation of WHO and PAHO technical documents, reports and tools that facilitate the implementation of interventions to address TB prevention and control in countries.
- Support for the participation of young professionals in an international drug resistant TB virtual training course in November 2021.
- Final preparation of the annual regional TB report.
- Support for developing protocols and conducting catastrophic cost surveys to respond to one of the three high level indicators of the End TB Strategy.
- Increased and continued coordination and involvement of civil society groups and leaders through the implementation of the ENGAGE TB approach.

- Continued support for human resources for the Regional TB Team and its capacity to provide technical support to countries, including the PAHO/USAID TB fellow.

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

- Despite restrictions due to the COVID-19 pandemic, most planned activities can be conducted virtually despite delays and needs for close follow up. Uncertainty remains regarding return to in-person meetings and duty travel.
- The current teleworking setting has raised the demands of technical support from countries, partners, civil society, and others, due to the easy accessibility of virtual platforms.
- The current virtual scenario has continued to produce savings that have required redirecting funds to support activities like training and translation.
- The COVID-19 pandemic has affected not only provision of services but also the supply chain for TB services and products. Nonetheless, national TB programs continue to be resilient.
- Once in-person technical support activities resume, a mixed scenario that maintains some virtual activities should be considered, due to some of the advantages of this mode of technical cooperation in terms of extended reach and cost savings.

Deliverables:

- Regional TB Report 2020 (English version)
 - https://iris.paho.org/bitstream/handle/10665.2/55194/9789275124475_eng.pdf?sequence=4&isAllowed=y
- World TB Day 2022 commemoration materials and video:
 - <https://www.paho.org/en/campaigns/world-tuberculosis-day-2022> (English)
 - <https://www.paho.org/es/campanas/dia-mundial-tuberculosis-2022> (Spanish)
 - Article: http://enfermedadesemergentes.com/revistas/enf-emergentes_1_2022.pdf
- Translation of documents into Spanish:
 - WHO consolidated guidelines on tuberculosis. Module 1: Prevention
https://iris.paho.org/bitstream/handle/10665.2/55801/9789275323144_spa.pdf?sequence=1&isAllowed=y
 - Treatment of drug-susceptible tuberculosis: rapid communication
https://iris.paho.org/bitstream/handle/10665.2/55884/9789275325360_spa.pdf?sequence=1&isAllowed=y
 - Handbook for the use of digital technologies to support tuberculosis medication adherence
https://iris.paho.org/bitstream/handle/10665.2/55815/9789275325063_spa.pdf?sequence=1&isAllowed=y
- Review of translations underway:
 - WHO operational handbook on tuberculosis Module 1: TB prevention treatment
 - WHO consolidated guidelines and operational handbook on tuberculosis. Module 2: screening
 - WHO consolidated guidelines and operational handbook on tuberculosis. Module 3: diagnosis
 - WHO consolidated guidelines and operational handbook on tuberculosis. Module 4: treatment
 - WHO consolidated guidelines and operational handbook on tuberculosis. Module 5: management of tuberculosis in children and adolescents

- Recordings of monthly regional virtual sessions Spanish/English can be sent upon request
 - TB surveillance (October 27th)
 - Global TB Plan (December 7th)
 - TB drugs (February 4th)
 - World TB Day – TB in children and adolescents (March 25th)

Topic 2: Malaria

Malaria remains a major public health threat for many countries in the Americas. While several countries in the region are getting closer to eliminating the disease, the increase in malaria transmission since 2015 shows the vulnerability of the results achieved to date.

During the reporting period, the PAHO-USAID umbrella agreement has supported both the consolidation of the achievements in countries that are close to eliminating malaria (E-2025 initiative) and the reorientation of operations in countries with the highest number of cases. The Year 6 workplan incorporated the priorities from the regional consultation process and the strategic lines of action outlined in the Regional Plan of Action for Malaria Elimination 2021-2025 that was finalized in Year 5. Actions have also been oriented to align efforts with the Global Fund (GF), 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 to optimize the use of resources.

Through this agreement, USAID has contributed to the following main topics of the Regional Plan: improvements in malaria diagnosis with microscopy and rapid test; antimalarial drug supply and policies; 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); improvements in vector control interventions; and cross-cutting strategies such as the platform to support actions in municipalities with a high malaria burden.

However, during the first half of Year 6, the COVID-19 pandemic continued to affect technical cooperation and the malaria response in the countries. At country level, the pandemic's effects include a change in political priorities and disruptions in operational structures and logistics. The reactivation of population dynamics in endemic areas is imposing a threat, particularly for public health structures in rural areas that were affected during the pandemic waves. Nevertheless, despite the limitations, PAHO managed to maintain permanent interaction with the Ministries of Health and advance the principal areas of work included as part of the USAID workplan. Mitigating the effects of the COVID-19 pandemic on the malaria response in the region continued to be part of the agenda while trying to advance with the changes and improvements promoted by the new Plan of Action 2021-2025, oriented to have a higher impact on malaria transmission in the coming years.

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

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

- The CDE/VT regional warehouse in Panama continued to play an important role avoiding stockouts in countries due to the ongoing delays in the supply chain related to the barriers imposed by the COVID-19 pandemic. Thirteen countries received support with one or more antimalarial drugs to prevent stock-

outs, manage outbreaks, and treat imported cases, as well as severe ones. Support was also provided to Costa Rica, Ecuador, and Honduras with Rapid Diagnostic Tests (RDTs) for malaria outbreak containment.

- Advances in research towards the development of a strategic and comprehensive approach to radical cure in the region with progress in collaboration with *Impact Malaria* for the study of primaquine in Colombia; preparation of tools for risk-benefit analysis, adherence, and pharmacovigilance; and dialogue with countries on concrete actions to improve policies on radical cure.
- New results from the implementation of the WHO HRP2 deletion protocol in 4 municipalities (Tumaco, Guapi, Quibdo, and Buenaventura) in Colombia and development of capacities and experiences to implement surveillance of this event in a programmatic way.
- Technical assistance enhanced with the implementation of RDTs by volunteer collaborators and the expansion of their use by health facilities (Costa Rica, Honduras, Dominican Republic, Peru, Guyana, and Ecuador).
- Publication of results from pilot intervention regarding strengthening therapeutic adherence and pharmacovigilance to antimalarial treatment in Manaus, Brazil: a multicomponent strategy using mHealth.
- 8th round of EQAP implemented with participation of 23 national laboratories. Results were analyzed and will be published soon.
- Support provided to countries for the implementation of LLIN, including the development of a protocol for the simplified monitoring of possession and use; direct support was also given to improve implementation in the field.
- Progress in implementing the entomological surveillance approach promoted by WHO (Malaria Surveillance Manual) based on malaria risk stratification and strategic elements such as sentinel sites and foci investigation. During this period, support included planning exercises at national level, technical documents, training of field workers, and updates on insecticide resistance and use of data.

Outcome 2.2: Malaria surveillance

- Timely and effective support to countries in containing outbreaks related to the disruptions generated during COVID-19 (Kaukira in Honduras) and that are a challenge in the last mile towards elimination (Dominican Republic, Costa Rica).
- In complementarity with RMEI, countries are making significant progress implementing microstratification analysis to organize “early detection, timely investigation, and prompt response” activities in main foci.
- Progress towards the implementation of online malaria information systems and dashboards to promote real time analysis and better-informed decisions at local and national level.
- Malaria data from the region included in the World Malaria Report 2021 and is being disseminated.

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

- During the period, Belize completed three years without malaria transmission. The country received permanent support from PAHO to maintain surveillance and currently the preparation actions for certification as a malaria-free country are underway.
- The region's malaria advocacy platforms have managed to adapt with strong collaboration from partners. Malaria Day and Malaria Champions were held virtually on 5 November 2021, with participation of 850+ people from more than 40 countries and 43 organizations. Two Malaria Champions (municipalities with a high malaria burden) from two countries were honored for their work in achieving sustained decreases in malaria cases in the last four years.
- The Guiana Shield Meeting was held in October 2021 to analyze priorities, challenges, and opportunities, as well as update the framework for joint action by countries and partners.
- Implementation of the methodology for verification of zero cases of malaria.

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

Lessons learned from the project included:

- Organizing the basic malaria operations at the local level (microstratification and DTI-R) should continue to be a main strategy in the Regional Plan of Action. This approach has been a main factor in foci that have substantially reduced transmission in 2021 (La Gomera, Andoas, and Santo Domingo), it has managed to attract the attention of other partners (RMEI), and it is an approach where inter-programmatic and intersectoral efforts can transform into concrete actions. This approach to act locally was also reinforced in the WHO GTS update in 2021 and is a key element in the current global discussion on rethinking malaria.
- The importance of support actions to monitor the effectiveness of LLINs and efforts to improve the use of bed nets by the community.
- The reintroduction of transmission in the Honduran Mosquitia after the massive reduction until 2019 highlights the weaknesses in malaria structures and capacities at the subnational level.
- There are positive results in efforts to seek complementarity of USAID support with other initiatives (RMEI, DATA SI Global Fund project) that also contribute to the Regional Plan and share common objectives.

Some challenges encountered during the implementation of Year 6 included:

- During 2021 and 2022, the ongoing restrictions imposed by the pandemic for field activities by health systems and disease control programs were a challenge for technical cooperation in the reporting period.
- Travel restrictions for the mobilization of international consultants and advisors have limited progress in some activities, a situation that is expected to begin to be normalized in the second half of 2022.
- Instability and changes in technical counterparts in the ministries of health have limited progress.
- Structural weaknesses of malaria programs at the national and intermediate levels continue to be a main challenge with a large impact on technical cooperation.
- Intersectoral action continues to be a challenge. The ongoing limitations of the second year of the pandemic did not help to better address this component in activities of the Plan of Action, such as the approach to malaria in mining and habitat modification actions.
- Legal and regulatory barriers persist to ensure early diagnosis and treatment for all communities, for example, the implementation of diagnosis (RDT) and treatment by community agents.

- Supply management, particularly the correct estimation of needs and purchasing processes, continues to be an issue in some countries.

Deliverables:

- USAID LAC RMP Partner Meeting- PAHO Presentation, 1 October 2021
- Malaria Day in the Americas 2021 (<https://www.paho.org/en/campaigns/malaria-day-americas>) and 2021 Malaria Champions of the Americas Finalist Videos (https://www.youtube.com/watch?v=NRMjMU873_c, <https://www.youtube.com/watch?v=yniNikj8APA>)
- World Malaria Report 2021 (<https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021>)
- Key discussions and conclusions from the meeting to eliminate malaria in the Guiana Shield, October 2021
- Draft manual for simplified monitoring of possession and use of mosquito nets
- Dashboard proposal for risk benefit analysis in radical cure
- Follow-up on the consolidation of quality assurance processes for malaria diagnosis in Ecuador (Technical report)
- Microstratification and microplanning of malaria in localities of the departments of Beni and Pando, Bolivia (Technical report)
- Strengthening therapeutic adherence and pharmacovigilance to antimalarial treatment in Manaus, Brazil: a multicomponent strategy using mHealth (<https://malariajournal.biomedcentral.com/articles/10.1186/s12936-022-04047-3>)
- Virtual course on malaria microscopy (<https://www.campusvirtualsp.org/es/curso/curso-de-diagnostico-microscopico-de-la-malaria-2021>)
- Draft instrument for the Evaluation of Malaria Programs

Topic 3: Neglected Infectious Diseases

Neglected infectious diseases (NID) impose a large burden on the lives of marginalized populations across the globe and in the region of the Americas. The burden of disease is related to poverty and income inequality and disproportionately affects vulnerable communities, including certain ethnic groups. It is estimated that in 2018 approximately 185 million people lived in poverty. In 2018, at least 13% of the approximately 648 million inhabitants of Latin America and the Caribbean lacked access to safe water supplies and 55% lacked access to adequate sanitation facilities.

In 2016, PAHO's Directing Council approved the "Plan of Action for the Elimination of Neglected Infectious Diseases and Post-elimination Actions 2016-2022". In 2019, PAHO's Directing Council approved the "Disease Elimination Initiative: a policy for an integrated sustainable approach to communicable diseases in the Americas" which sets the goals of eliminating, by 2030, more than 30 communicable diseases, 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.

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

Lymphatic Filariasis Elimination Guyana: Implementation of the pre-TAS (Transmission assessment surveys)

To evaluate the impact of Mass Drug Administration (MDA) using the triple drug therapy – Ivermectin, Diethylcarbamazine and Albendazole (IDA), the surveys were carried out in November-December 2021, 9 to 10 months after the last round of the 2021 LF MDA-IDA. After the two consecutive successful rounds of MDA-IDA, the approved protocol guided the methods and procedures for the pre-IDA impact surveys (or pre-TAS) implementation in regions 2,3,4,5,6 and 10. Due to the low level of transmission reported in the remapping survey, the number of villages and the IDA coverage during the 2019 and 2021 MDA-IDA, regions 1 and 7 were exempted from these surveys.

A total of 7,761 participants were enrolled into the study from across six endemic regions (2, 3, 4, 5, 6 & 10) and 13 evaluation units (EUs). In 11 out of the 13 EUs, the number of microfilariae (Mf) positive participants was below the 1% cutoff value. These were EU 2.1, EU 2.2, EU 3.1, EU 3.2, EU 4.2, EU 5.1, EU 6.1, EU 6.2, EU 6.3, EU 10.1 and EU 10.2. In Region 4, EUs 4.1 and 4.3 are currently pending further Mf results to assess whether they were below the cutoff value. This will support the decision as to whether or not to conduct an additional round of IDA in these EU's or proceed to plan for the IDA impact surveys.

The success of these surveys has once more proven Guyana's commitment to stopping the transmission of LF. The team of Guyana's LF Elimination Program has proved to be very capable, empowered, committed, and enthusiastic.

Trachoma toolbox

A first version of the trachoma toolbox was developed adapting international recommendations to the context of the region of the Americas. The toolbox has 4 modules: 1) trachoma rapid assessments, 2) TT-case active finding, 3) monitoring and follow up of TT cases, 4) planning and organization of TT surgery campaigns. The first version was reviewed by trachoma national managers and TT surgeons. An adjusted version was produced at the end of 2021, including the updates on the trachoma grading system published by WHO in October 2020. The toolkit is currently finalized and is being edited.

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

This manual describes the basic concepts of microplanning, steps, and examples of tools to develop and implement micro plans for the implementation of preventive chemotherapy to control and eliminate neglected tropical diseases. The primary audience of this manual are the local teams in charge of implementing preventive chemotherapy as a public health intervention for the prevention and control of NTDs. The development of this manual is the result of a collaborative effort between PAHO, WHO, USAID, CDC, FHI 360, ENDFund and RTI. The English version was finalized and is currently in the edition and design processes. It will be published and translated into Spanish.

Schistosomiasis surveys in Dominican Republic

The surveys were implemented in November-December 2021. Children and adults were sampled in the historically known endemic areas for schistosomiasis in Dominican Republic. The dried blood samples (DBS), collected on filter paper in both children and adult populations, are being stored in adequate conditions in

Dominican Republic and should be sent in due course to the CDC to be processed. Once available, the results will be analyzed.

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

Lessons learned

The successful implementation of interventions for the control or elimination of NID, such as surveys and MDA, is feasible even under the restrictions imposed by the COVID-19 pandemic, if appropriate planning, microplanning, organization and follow up is ensured.

Challenges

During 2020 and 2021, the COVID-19 pandemic hit the Americas 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. Technical cooperation missions and face-to-face meetings were canceled. Also, in many countries, the officials of the ministries of health working with the NID programs were asked to support the response to the COVID-19 pandemic.

Despite these challenges, PAHO's Regional NID Program provided continued technical cooperation and support to national NID programs and supported plans for disease elimination utilizing the different electronic means available. The countries were also informed of WHO recommendations on the resumption of activities in the context of the pandemic. In some countries community-based activities, including surveys and MDA, resumed following these recommendations.

Deliverables:

No links to products developed during the reporting period are available because the products are currently being edited and finalized. Links will be forthcoming.

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

This is the third year of an inter-programmatic and inter-departmental workplan to support the countries of Latin America and the Caribbean in accelerating their efforts to eliminate social inequities in health. Activities link together the work of the PAHO Departments of Family, Health Promotion and Life Course (including the Latin American Center for Perinatology, Women's and Reproductive Health), Health Systems and Services and Evidence and Intelligence for Action in Health. To build capacity among Member States, the health inequities workplan focuses on 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.

The inter-agency movement Every Women, Every Child- Latin America and the Caribbean (EWEC-LAC) was formed with the shared leadership of eight international organizations to work towards the adaptation and

implementation of the Global Strategy for Women's, Children's, and Adolescents' Health (2016- 2030) in Latin America and the Caribbean, through catalyzing and supporting countries in their efforts to deliver upon the targets and goals set forth in the Global Strategy. The EWEC-LAC movement 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. 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). With the support of USAID, starting on October 1, 2021, the administration of EWEC-LAC was transferred from UNICEF back to PAHO.

In the area of neonatal health, the interventions carried out during the first half of Year 6 complement and expand upon those implemented during Years 4 and 5. Efforts were focused on reducing neonatal mortality, which remains the primary contributor to the burden of infant and child mortality in the region. Activities were centered on improving the quality of care of newborns to reduce preventable morbidity and disabilities related to perinatal adverse outcomes. Other key areas of work included strengthening data collection and the use of information for decision-making.

Over the last two years due to the pandemic, several countries have registered a notorious excess of maternal mortality. Some studies confirmed that pregnant women are at higher risk of hospitalization, admission to the ICU, need for mechanical ventilation assistance and death. In addition, PAHO's Epidemiological Updates Coronavirus disease (COVID-19), published from August 2020 to December 2021, highlighted high levels on deaths among pregnant women, related to COVID-19 in 24 countries of the Americas, including the United States. There have also been reported increases in deaths among pregnant women who were not infected with SARS-CoV-2. This harsh reality occurred in a region where pre-pandemic, the rate of annual reduction in maternal deaths was slowing down, putting at risk the fulfillment of the goals established to reduce maternal death, both at the regional and at the country level. Moving forward, a renewed focus needs to be placed on the prevention of maternal death, reviving successful past efforts, and sustaining them over time, and developing new, innovative actions whenever possible.

As a result of disruptions to essential health services during the COVID-19 pandemic and mobility restrictions aimed at reducing exposure of the population to the coronavirus, health access barriers have been exacerbated in the Americas. Assessing what segments of the population are unable to use health services and what are the most important obstacles is a first fundamental step toward determining future sustainable solutions towards equitable and universal access to health.

Through the umbrella grant and guided by Resolution CD53.R14 (Strategy for Universal Health), the Regional Compact on Primary Health Care (PHC 30-30-30) and PAHO's Strategic Plan for the period 2020-2025, PAHO has been able to address these issues by conducting several mixed method in-country studies on access barriers to health services. These analyses are currently being used to inform national policymaking. To date, Year 6 of the umbrella grant has also focused on showcasing regional and country case studies conducted from Year 4 to Year 6, including lessons learned and practical applications of findings. With the perspective of a new agreement and a projection of these strategic lines in a future umbrella grant, PAHO has also made progress in conducting access barriers analysis in two additional countries.

Finally, the region is currently confronting a critical shortage of health workers, a situation further aggravated by the COVID-19 pandemic; policymakers are therefore looking for innovative strategies that optimize knowledge, skills, and resilience among the health workforces. In its *Regional Strategy on Human Resources for Health (2018-2023)*, PAHO highlights that a health workforce crisis could have disastrous implications for the health and well-

being of millions of people in the Americas. In addition, there is a recurrent disconnect between the health and education sectors that results in a mismatch between the supply of health and social care workers and the health care needs of the population. As the COVID-19 pandemic has demonstrated, this situation is particularly challenging at the first level of care in underserved areas with vulnerable populations, and a major contributing factor to social inequities in health. Although there is increasing evidence supporting interprofessional collaborations and teamwork in improving health inequities, clinical outcomes and preventing errors, the lack of interprofessional, socially accountable education has been identified as a major barrier to achieve universal health. Educating and training the health workforce within the context of the social determinants of health should strengthen health services and reduce barriers to achieve universal health access and coverage.

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

- Advocacy across the region for the prevention and reduction of pregnancy in girls < 15 years
- A final draft of the equity-based analysis of the SDG 3 indicators for the age group of 15-24 years, pending dissemination.
- Updates of the country inequality profile dashboards obtained from household surveys, available as an open source for technical information.
- An original commentary article submitted to the International Journal for Equity in Health titled "The Every Woman Every Child Initiative: Supporting Countries in Latin America and the Caribbean to Reduce Social Inequalities in Health" led by the MMWG. The manuscript focuses on the work done by the EWEC-LAC initiative to support LAC countries in strengthening their efforts to reduce social inequalities in health; particularly, it provides an overview of EWEC-LAC's support to LAC countries in measuring and monitoring social inequalities in health, designing, and implementing equity-oriented strategies, policies and interventions, and advocating for the reduction of social inequalities in health. This article is important for a wide range of stakeholders to raise awareness about EWEC-LAC's support to countries, especially as 2030, the target year for the Global Strategy for Women's, Children's and Adolescents' Health and Sustainable Development Goals, approaches.
- An interactive web based computational tool for countries was developed to establish numerical targets for the SDG 3 indicators by 2030 with a focus on reducing countries inequalities after they provide the necessary data by uploading a CSV file or by manual input.
- EWEC-LAC has made great progress in the e-learning course on measurement, analysis, and monitoring of social inequalities in health, where 4 of the 6 modules that make up the course have been developed.
- Realization of a campaign called "[28 Days, Time to Care and Love.](#)" This campaign was oriented to raise awareness regarding the importance of newborn care and provide relevant and evidence-based information on the subject. As part of the campaign, the testimonies obtained from families about the importance of newborn care, its challenges, and the importance of providing family-centered care within health services were presented. Likewise, [an App for mobile devices](#) (eCBB) was launched for families and caregivers. Finally, as part of the campaign, a policy brief was presented, developed with key actors, and aimed at strengthening policies to improve newborn health.
- Completion of the design and development of the virtual courses on Essential Conditions for Newborn Care and on the Comprehensive Follow-up to Newborns with Risk Conditions.
- Development of a set of selected indicators for the surveillance, prevention and approach of neonatal infections and neonatal sepsis, which will be analyzed by a specialized technical panel in the second phase of the year.
- In Peru, the "Technical Health Standard for Epidemiological Surveillance of Extreme Maternal Morbidity in Peru" was presented. The launch took place via a virtual meeting which counted on the participation of more than 500 professionals from all health networks in that country.

- Capacity building activities for 75 professionals in the Dominican Republic to audit cases of maternal near miss. These professionals were appointed by the government and came from the Ministry of Health and the National Health Insurance (SNS for its acronym in Spanish).
- During the first semester of Year 6, PAHO received approval and editorial recommendations from the Pan American Journal of Public Health (PAJPH) on the publication on barriers to access reported by women in the region of the Americas. This peer-reviewed article will support PAHO's efforts to share knowledge related to the health access barriers analysis methodology and strengthen gender-based analysis.
- Three additional draft manuscripts showcasing country case studies and lessons learned from implementing a mixed-method methodology to analyze access barriers are under development.
- The initial proposal for a regional publication entitled "*Salud universal en las Américas: hacia un mejor entendimiento y abordaje de las barreras de acceso que enfrentan las poblaciones en situación de vulnerabilidad*" (Universal Health in the Americas: towards a better understanding and approach to address the barriers to access faced by populations in situations of vulnerability) has been internally approved, and the development process is on-track and programmed for the second half of Year 6.
- PAHO has prepared a concept note and programmed a regional webinar for the second semester of Year 6 to introduce the results of country studies and share lessons learned and recommendations with health authorities and key stakeholders.
- Under the prospect of a new agreement, PAHO is conducting access barriers analysis in the Dominican Republic and Colombia in close collaboration with health authorities who are using preliminary results as inputs for developing action plans to strengthen essential public health capacities.
- A scoping review on barriers due to regulation and accreditation among health professions in the region of the Americas is underway, and it will be added to the package of products generated under Strategic Line 3 of the health inequities workplan.
- Completion of the module on the impact of the Covid-19 pandemic and emerging tendencies on health professions education is proceeding. In addition, translation of the course on social accountability into Spanish and Portuguese have been initiated.
- The initial proposals for two regional publications entitled "*The Indicators for Social Accountability Tool in Medical Education*" and "*PAHO/WHO Regional Guidelines to support the Advancement of Interprofessional Education and Collaborative Practice in the Americas*" have been internally approved, and the official publication process is on-track and programmed for the second semester of Year 6.
- During the second semester, a regional series of webinars have been programmed to disseminate (as a package) the final products developed under this line of the grant, together with lessons learned and recommendations. A concept note has been prepared and circulated among health authorities and key stakeholders. The webinars will be freely available and broadcasted globally, with the participation of experts from the Americas and other parts of the world, to facilitate dissemination and exchange of experiences in this field.
- In addition, PAHO has continued to pilot, disseminate, and share the products generated during previous years. PAHO has focused mainly on collaborations with international, regional, and subregional institutions dedicated to the education of health professionals and has participated in multiple virtual webinars and meetings. Some selected examples would be: PAFAMS-Pan American Federation of Associations of Medical Schools, ALAFEM-Latin American Association of Medical Schools, ORAS-CONHU-Andean Health Federation, AFMC-Association of Faculties of Medicine of Canada, The Network TUFH (Towards Unity for Health) and ISAATT (International Social Accountability and Accreditation Think Tank)
- The ISAT Instrument - Indicators for Social Accountability Tool -developed under this grant- continues with its global expansion. A new set of 50 medical schools around the world, including 20 representing academic institutions in the Americas, have been identified and will be applying the instrument. A

dedicated website has been developed to facilitate the application of the tool among the participating institutions and to enable future research activities. The platform will be also available in Spanish and Portuguese during 2022.

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

- The pandemic delayed the development of key workshops on *the Regional Framework for Monitoring Social Inequalities in Health*. In addition, EWEC-LAC started an evaluation process to assess the efficacy of activities and deliverables of the working groups and to identify priorities that will help to improve the level of influence of EWEC-LAC across the region.
- The activities and achievements during this semester have provided information, perceptions and needs from the perspective of families and caregivers about comprehensive and people-centered care for newborns.
- Moving towards the development of tools based on computer and digital technologies is feasible and desirable, to strengthen the quality of care for newborns. The next challenge will be to scale up these tools their full use across the entire region.
- Political and social problems affected the specific work in some countries; in Haiti for example, specific support to the maternal mortality committees could not be operationalized.
- It is important to reiterate the challenges that the pandemic is still exerting, especially when trying to coordinate international teams and professionals in different countries. The emergence of the omicron COVID-19 variant in the region demanded again the full-time attention of national health officials and academic partners. This required adaptation of timelines and changes in the chronogram of our working plan.
- Since the declaration of the COVID-19 pandemic, PAHO's Virtual Campus of Public Health (VCPH) educational and training activities have concentrated in responding to the emergency. Public launches of pending educational resources developed under the umbrella grant will be finalized and shared as public goods during 2022, including the open-access resources on social accountability, interprofessional education and emerging tendencies on health professions education during the Covid-19 times
- As mentioned in previous reports, perhaps the principal lesson learned during this period has been the demonstration, in practice, of the power of purposeful "seed funding" by USAID at regional level and global multilateral collaboration to advance important global initiatives. For example, the ISAT Instrument, developed entirely with the support of this USAID grant and initially focused on several Latin American countries, is now benefiting a world-wide scenario to advance social accountability in the education of health profession.
- The importance of inter-agency work has been reinforced, as these collaborations not only improve the quality of technical products, incorporating different points of view and needs, but they also result in important work synergies, improve the use of resources, and avoid duplication.

Deliverables

EWEC-LAC

- The report on inequalities in Maternal, Child and Adolescent Health in Latin America and the Caribbean: A regional baseline assessment of the EWEC LAC indicators for the Agenda 2030. The link will be available after its launch.
- Regional Contest on Good Practices that Promotes Equity in Health for Women, Children and Adolescents - second phase:

- Preparation of 9 videos on the winning initiatives of the Good Practices contest:
 - Argentina: [ENG / SPA](#)
 - Brazil: [ENG / SPA / POR](#)
 - Bolivia: [ENG / SPA](#)
 - Colombia 1: [ENG / SPA](#)
 - Colombia 2: [ENG / SPA](#)
 - Perú 1: [ENG / SPA](#)
 - Perú 2: [ENG / SPA](#)
 - Perú 3: [ENG / SPA](#)
 - Nicaragua
- General promotional video about the contest [ENG / ESP / POR / FRE](#).

Maternal Health

- Launching of the Technical Health Standard for Epidemiological Surveillance of Extreme Maternal Morbidity in Peru. <https://www.dge.gob.pe/portalnuevo/informativo/prensa/cdc-presento-la-norma-tecnica-de-salud-para-la-vigilancia-epidemiologica-de-la-morbilidad-materna-extrema-en-el-peru/>
- Access to the virtual course on Maternal Near Miss, developed and validated in Dominican Republic. (ID: testuser Password 1234\$) <https://www.campusclap.org/course/view.php?id=2>

Neonatal Health

- <https://www.paho.org/en/campaigns/28-day-campaign-newborn-health>
- <https://www.youtube.com/watch?v=3skLT7GQe3I>

Health Systems and Services

- Approved publication on barriers to access reported by women in the Region (unpublished edited manuscript forthcoming).
- Preliminary report on access barriers for Colombia and Dominican Republic (forthcoming).
- Draft manuscripts showcasing country case studies and lessons learned from implementing a mixed-method methodology to analyze access barriers are under development (forthcoming)

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

FEPAFEM-PAFAMS

<https://www.fepafempafams.org/>

ALAFEM/UDUAL & UNAM

<http://www.facmed.unam.mx/>

http://alafem_udual.facmed.unam.mx

ORAS-CONHU: Organismo Andino de Salud – Convenio Hipólito Uname
Red Andina de Asociaciones de Facultades de Medicina

<http://orasconhu.org/portal/>

https://www.aspefam.org.pe/red_andina/

AFMC – Association of Faculties of Medicine of Canada

<https://www.afmc.ca/en>

The Network TUFH (Towards Unity for Health)

<https://thenetworktufh.org/>

ISAT Instrument (Indicators for Social Accountability Tool) / Digital platform under development and in piloting phases: <https://socialaccountabilityhealth.org/>

Topic 7: Health Information Systems

Countries of the region of the Americas continue to make considerable progress in strengthening information systems for health (IS4H). However, the COVID-19 pandemic has created some significant challenges, as well as the need to accelerate digital transformation processes so that data is reliable and protected, available in a timely manner and in the necessary format, and that it can be used as evidence for decision-making, formulation, monitoring and evaluation of policies, and the production of intelligence for action in health. Through PAHO's Department of Evidence and Intelligence for Action in Health (EIH) and thanks to the cooperation of USAID, the countries of the Americas are advancing rapidly in the processes of digital transformation of the health sector, within the framework of e-government initiatives.

An important recent priority under the USAID-PAHO collaboration was the support provided to institutions to evaluate their capacity to gather critical and high-quality data in the COVID-19 pandemic response; this included the need to identify current data systems' capacity to provide reliable and constructive data for rapid and real time decision-making.

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

- Technical cooperation activities related with the results of the IS4H Maturity Assessment process; these strategic recommendations resulted in national roadmaps for the digital transformation of the health sector in nine countries.
- All maturity assessments were conducted with a strong emphasis in vital statistics, and thanks to this process and to the ongoing collaboration from USAID, new partners approached PAHO to continue to strengthen vital statistics and vital registration systems across the Americas from different angles. An important MoU was signed with nonprofit Vital Strategies with the aim of ensuring a more expanded collaboration on vital statistics. Assessment reports are currently in progress and being discussed with national authorities.
- The work of the IS4H initiative was taken into consideration as part of PAHO's contribution to the Summit of the Americas
- In addition to direct technical cooperation activities, it is important to highlight that there have been more than 50,000 downloads of the IS4H tools and methodologies recorded on the PAHO's IS4H portal. All tools officially recognized the support of USAID.
- Based on the first ever region-wide analysis of open health data sets, PAHO's Platform for Public Health was updated, and core indicators were published and presented at PAHO's 59th Directing Council. More than 240 indicators from all Member States are up to date on PAHO's PLISA Platform. Dashboards and additional information can be found here: <https://opendata.paho.org/en/core-indicators/core-indicators-dashboard>

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

- Despite ongoing travel limitations and restrictions due to the COVID-19 pandemic, most planned activities were conducted according to the original workplan.
- As in the previous reported period, the current teleworking setting has raised the demands of technical support from countries, partners, civil society, and others, due to the easy accessibility of virtual platforms. However, the complexity now is that some face-to-face meetings are being organized and therefore PAHO needs to be prepared for a hybrid model of technical cooperation with countries.
- From a technical standpoint, as part of an after-action review conducted with a group of partners, experts, and representatives from the areas of information systems and digital health in the countries of the Americas a big lesson learned was on how to engage the health sector within the eGovernment initiatives.

Deliverables

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

Maturity Assessment Planning Guide	https://iris.paho.org/handle/10665.2/55663
Developing a National eHealth Strategy	https://iris.paho.org/handle/10665.2/55661
Functional Assessment Consultancy Terms of Reference	https://iris.paho.org/handle/10665.2/55664
IS4H Terms of Reference for ICT Assessment and Costing Consultancy	https://iris.paho.org/handle/10665.2/55666
Post description IS4H Manager	https://iris.paho.org/handle/10665.2/55665
Rapid assessment tool for critical data gathering	https://iris.paho.org/handle/10665.2/53614
Secure, Interoperable Patient Portals with Quality Data	https://iris.paho.org/handle/10665.2/55407
Elements for a Data Management Policy: Information Systems for Health	https://iris.paho.org/handle/10665.2/54961
National Data Governance Framework: Information Systems for Health	https://iris.paho.org/handle/10665.2/54960
Monitoring and Evaluation Framework on Information Systems for Health	https://iris.paho.org/handle/10665.2/55405
Functional Assessment on Information Systems for Health	https://iris.paho.org/handle/10665.2/55658
Guiding Principles: Information Systems for Health	https://iris.paho.org/handle/10665.2/55087
Glossary of terms on Information Systems for Health	https://iris.paho.org/handle/10665.2/54959
Set of Maturity Model Basic Recommendations: Information Systems for Health	https://iris.paho.org/handle/10665.2/54958
Maturity Assessment Levels: Information Systems for Health	https://iris.paho.org/handle/10665.2/54962
Artificial Intelligence in Public Health	https://iris.paho.org/handle/10665.2/53732

Connectivity and Bandwidth: Key Areas for Improving Public Health	https://iris.paho.org/handle/10665.2/54578
Introduction to Semantic Interoperability	https://iris.paho.org/handle/10665.2/55417
Electronic Health Records and the Importance of How to Document	https://iris.paho.org/handle/10665.2/55410
Electronic Health Records (EHR) and Interoperability: Understanding two key concepts for a better Public Health response	https://iris.paho.org/handle/10665.2/52003
The potential of frequently used information technologies during the pandemic	https://iris.paho.org/handle/10665.2/52021
COVID-19 and the importance of strengthening Information Systems	https://iris.paho.org/handle/10665.2/52127
Why Predictive Modeling is Critical in the Fight against COVID-19	https://iris.paho.org/handle/10665.2/52276

Topic 1: Tuberculosis

No.	ACTIVITY	Products/ Deliverables	MID YEAR TECHNICAL REPORT 2022		
			Progress during current period	Challenges	Remarks
Outcome: 1.1 Increased country capacity for integrated patient centered TB care and prevention, with emphasis in populations in situations of vulnerability					
Principle Intervention: 1.1.1 Strengthen the capacity of National TB Programs (NTPs) for integrated prevention and care of TB and MDR/XDR-TB					
1	Conduct National TB Program (NTP) monitoring visits to selected countries	Visit reports available	Ecuador (October 4-8, 2021), Planning of TB monitoring visits to: Bahamas, Belize, Dominican Republic	Delays by Ministries of Health in providing concurrence.	Peru postponed a high level in-person visit until the end of 2022.
2	Support the development of the international TB courses with partners	Courses delivered	One virtual course on drug resistant TB was conducted in November 15-19, 2021. Planning of one virtual international course on TB epidemiology and control to be conducted in April 2022	None	Given the high demand for the participation on the drug resistant TB course and concurrent savings due to the virtual format, more participants were sponsored.
4	Continue supporting the implementation of the regional operational guidance on TB in indigenous peoples in selected countries: initial implementation and follow-up through virtual visits	Virtual visit reports	Review and editing of visit reports to Panama, Argentina, and Mexico Planning of next visits to: Colombia, Surinam, Guyana, Peru, Bolivia, Chile and Ecuador.	None	The visits to Dominica and Belize have been postponed until the end of 2022
7	Support implementation of regional operational guidance of TB control in prisons in selected countries	Guidance implemented	Regional guidance in final review and preparation for initial visits to El Salvador, Paraguay, Peru, Costa Rica, and Ecuador.	Delays in this review due to other priority activities in the regional TB team	The visits to Brazil, Uruguay and Guyana have been postponed until the end of 2022.
8	Support for implementation of the Multisectoral Accountability Framework	Activity report available	Technical support for the implementation of the MAF TB has been provided to most countries in the region. Funding for related activities provided to key countries.	None	None

	for TB (MAF-TB) in the Region				
9	Development the regional TB report 2020	TB report completed	Regional TB report 2021 has been developed and is currently under final review before translation into English	None	None
10	Commemoration of World TB Day	Materials developed and published on website and virtual session conducted	Preparation, adaptation, translation and participation in related World TB Day materials and activities in coordination with WHO	None	This year the material was ready ahead of time.
11	Develop, translate, finalize, and distribute TB technical documents to support implementation of the End TB Strategy	Documents translated, edited, printed, and distributed	Multiple Spanish translations of WHO documents were done	Increasing prices for translation beyond budget	Given the higher prices, savings from other activities were transferred for these translations
12	Development, editing, translation and layout of regional operational guidance on TB/DM	Operational guidance developed	This activity has been postponed awaiting new WHO guidance on this topic		
14	Finalize e-learning course on the TB/HIV clinical management (in English and Spanish)	E-learning course developed	Translation of content in Spanish finalized. Digital course adaptation in process		
15	Contribute to the development and update of a course on TB in children and adolescents	Course developed	In process		
16	Support participation of selected countries in course on sequencing		This course will be conducted in September 2022	COVID restrictions for travelling	Given the characteristics of this course, to be conducted in person, it will depend on the loosening of travel restrictions
17	Continue supporting the development or updating of national TB plans aligned with targets of the End TB Strategy and commitments of the UNHLM-TB following the review conducted in YRS 3-4.	National TB plans developed or updated	In progress in Suriname, Costa Rica, Uruguay, Honduras, Guyana, and the Eastern Caribbean countries.		
Principle Intervention: 1.1.2 Reinforce PAHO's technical capacity at regional and subregional levels through greater human resources and advisory support					
1	Technical cooperation to countries through a TB	Positions hired/sustained	In progress		New PAHO/USAID TB Fellow incorporated in November 2021

	advisor, USAID-PAHO TB fellow, and administrative support				
	Support for the participation of TB regional staff in international meetings and conferences (WHO meetings, Union conference, ALAT, Parliamentary Congress and others)		Registration to the Union Conference in October 2021		The remaining funding has been reprogrammed due to COVID restrictions.
2	Virtual meeting of PAHO's renewed Technical Advisory Group for TB (TAG-TB)	Meeting report	This activity has been postponed		This activity will be an in-person event
Outcome: 1.2 Regional innovative initiatives and research for TB prevention and control strengthened and developed					
Principle Intervention: 1.2.1 Expand the initiative for TB control in large cities, focusing on hotspots, and develop or adopt new innovative initiatives					
1	Support monitoring, introduction, or implementation of the Initiative of TB control in large cities: visits and/or in country activities	Virtual visit reports	Follow up with the countries implementing this initiative. Technical support provided and funding for new cities in Bolivia, Chile, and Panama.		
2	Support civil society participation in TB and the implementation of the ENGAGE-TB approach in selected countries	Activity report available	Virtual workshops to implement the ENGAGE TB approach in Paraguay (October 2021) and Honduras (December 2021). Planning to conduct these workshops in Chile, Uruguay, and Argentina.		In coordination with Partners in Health Peru.
3	Support Epi-reviews in selected countries	Epi review conducted	Virtual visits in El Salvador and Ecuador (October 2021), Argentina (October-November 2021). Planning to conduct visits in Colombia, Chile, Paraguay, and Suriname.		Panama and Trinidad and Tobago postponed
4	Continue support implementation of recommendations from previous Epi-reviews in selected countries	Activity reports available	Funding provided to Dominican Republic, Guatemala, Jamaica, and Peru		
5	Continue support the implementation of studies on catastrophic costs due to TB in selected countries	Study report	Support provided to Argentina, Colombia, and Guyana. Currently in conversations with Honduras and Chile.		

Principle Intervention: 1.2.2 Accelerate progress towards TB elimination in low incidence countries					
1	Technical support to countries reaching low incidence level	Activity report available	Virtual visit to The Bahamas planning underway for April. In coordination with Trinidad and Tobago for financial support of follow-up activities.		

Topic 2: Malaria

No.	ACTIVITY	Products/ Deliverables	MID YEAR TECHNICAL REPORT 2022		
			Progress during current period	Challenges	Remarks
Outcome 2.1: Increased country capacity towards universal access to good quality malaria prevention, integrated vector management (IVM) interventions, malaria diagnosis and treatment.					
Principle Intervention: 2.1.1 Support countries towards universal access to good quality malaria prevention, integrated vector management (IVM) interventions, malaria diagnosis and treatment					
1	Support country capacity to strengthen malaria case management interventions. (Objective 1.1, 1.2, 4.1 Plan of Action 2021-2025)	Workshops and training reports. Reports on improvements in case detection (actions to improve seeking behavior and services for passive case detection). Guidelines and tools adapted.	Actions to organize the passive detection of cases in priority foci with emphasis on the inclusion of diagnosis in health services. This approach is being implemented in all the beneficiary countries in combination with actions related to microstratification and microplanning (activity 2.2.1.2). Support provided to train community health workers for case management in key foci.		During the rest of the year, efforts will be made to further connect these activities to promote similar processes in other countries with an emphasis on improving seeking behavior.
2	Support procurement of emergency stocks of anti-malarials for the regional warehouse (Objective 1.2 Plan of Action 2021-2025)	Quick response to potential outbreaks, and stock-outs prevented.	During the reporting period we procured the following malaria commodities: Malaria RDT (507 kits x 25 RDT) which arrived 25 March 2022. Additionally, the	Delayed country procurement processes, as well as problems with the supply chain imposed by the	Regional warehouse provided key support to Member States during challenges imposed by the COVID-19 pandemic on the global supply chain.

			warehouse support (including antimalarials already in stock) benefited 13 countries during the reporting period.	COVID-19 pandemic.	
3	Support countries to improve malaria diagnosis capacity with the implementation of an External Quality Assurance Program (EQAP) for malaria diagnosis <i>(Objective 1.1 Plan of Action 2021-2025)</i>	Slide panels developed and shipped to participant laboratories. EQAP results published.	EQAP 8th round results analyzed, publication in process. EQAP 9th round panels developed, first step between the two supranational laboratories implemented. Panels expected to be delivered to all the participant laboratories by second semester 2022.	Every year improved malaria situations in both countries with the supranational laboratories (HND & PER) becomes a challenge for the panel production with all the species and densities needed, plus travel restrictions imposed by the COVID-19 pandemic in both countries.	
4	Conduct Regional (ECAMM) and in-country (NCAMM) competency assessments to follow up on results from EQAP for malaria diagnosis and standardize QA procedures with participant countries <i>(Objective 1.1 Plan of Action 2021-2025)</i>	Microscopists certified. Country mission reports. QA country guidelines developed.	Implementation of a virtual course on malaria microscopy with more than 5,000 participants since April 2021 representing over 34 countries (currently only in Spanish). Consolidation of malaria diagnosis quality assurance processes (19-20 October) (Costa Rica). Follow-up on the consolidation of quality assurance processes for malaria diagnosis in Ecuador and Suriname. Virtual support to strengthen laboratory capacities as part of	In-person trainings canceled because of the restrictions imposed by the COVID-19 pandemic, so the ECAMM was canceled, and certificates were extended for one more year, as agreed with WHO.	https://www.campusvirtualsp.org/es/cursos/curso-de-diagnostico-microscopico-de-la-malaria-2021_

			prevention of reestablishment plan in Belize.		
5	Support countries on standard use and expansion of diagnosis capacities using RDTs, including selection and quality control procedures (Objective 1.1, 4.1 Plan of Action 2021-2025)	RDT document published. Reports on actions to improve coverage of RDTs. Reports on actions to improve use of RDTs.	Supported training to expand malaria service delivery using RDT, treatment of uncomplicated malaria, and data reporting in rural areas in Brazil, Peru, Colombia, mining and logging communities in Guyana, and active foci in Dominican Republic, Ecuador, and Costa Rica. Support also provided for procurement and implementation processes, including QA practices. Communication tools for community leaders and health workers (Costa Rica).	Delays in procurement processes plus the increase in cost of shipment for RDTs is becoming a challenge for some countries.	RDTs emergency procurement from our regional CDE/VT warehouse to support some countries (linked with activity 2.1.1.2).
6	Support surveillance to determine the current extent of <i>P. falciparum</i> populations with deletions of the Histidine-rich protein 2 (HRP2) and Histidine-rich protein 3 (HRP3). (Objective 1.1 Plan of Action 2021-2025)	Report on implementation of HRP2/HRP3 deletion WHO protocol in Brazil. Report on second part of WHO protocol implementation in Colombia. Report on progress in other countries.	Implementation of WHO protocol for monitoring HRP2 deletions in Colombia finished. Final data under analysis (molecular data) for corresponding publication. As an overview 370 samples were collected from 10 sites in 4 municipalities (Tumaco, Guapi, Quibdo and Buenaventura). In summary no problems were encountered with HRP2 deletion in the selected sites, proving that	Some delays experienced because of HR supporting the COVID-19 situation in the country.	

			the HRP2 based RDTs can continue to be used in Colombia.		
7	Support implementation of routine surveillance with collection of blood samples on filter paper to analyze molecular markers for antimalarial drug resistance on <i>P. falciparum</i> positive cases in selected countries and in hotspots for possible selection of resistance. (Objective 1.2 Plan of Action 2021-2025)	Results of continued K13 surveillance in Guyana with sample collection on risk targeted sites.	<i>P. falciparum</i> positive sample collection in high-risk areas continued as part of the routine surveillance in Guyana. More than 1,000 samples sent to our PAHO/WHO Collaborating Centre for corresponding analysis. So far, no particular mutation detected. PAHO will receive the corresponding report of analyzed samples by the end of April 2022.		Key strategy with TES to detect possible presence of important molecular markers directly related with artemisinin resistance.
8	Support evidence-based decisions regarding primaquine use based on the risk-benefit analyses (Objective 1.2 Plan of Action 2021-2025)	Working group (RC-WG) created to support countries on updating radical cure policies. Regional framework and route map integrating country needs and projects.	Preparation and discussion of the terms of reference for the radical cure working group. Proposal of a dashboard / visualization tool integrating the different components of the risk-benefit analysis. Contributions to protocol under development by UCSF for risk-benefit analysis as part of Impact Malaria actions. Discussion with national authorities in Panama on a demonstrative experience to improve radical cure policies in Kuna Yala region where the country is facing challenges with relapses and adherence to		Draft of dashboard / visualization tool to facilitate risk-benefit analysis in radical cure.

			treatment in indigenous populations.		
9	Therapeutic efficacy study to evaluate efficacy of first line treatment for <i>P. falciparum</i> cases implemented in Guyana. (Objective 1.2 Plan of Action 2021-2025)	Protocol development and results shared	Activity delayed. Meeting with national counterparts to discuss the proposal and prepare an action plan for its implementation scheduled for 2nd trimester of 2022.	Other priorities in public health (COVID-19) and malaria response (GF) have made it difficult to complete the study in 2022.	Actions continue to be carried out to start the study in 2022, but most of the implementation should occur during 2023.
10	Randomized control trial in <i>P. vivax</i> to evaluate efficacy and effectiveness of PQ total double dose (Objective 1.2 Plan of Action 2021-2025)	Support protocol development, as well as implementation with trainings and supervisory visits as needed.	Support provided for the development of the protocol and in permanent collaboration with Impact Malaria for the implementation of the study in Colombia. Currently pending local IRB approvals and corresponding IRBs from partner institutions involved, as well as per the coordination with the local implementer that was recently selected.		
11	Support programmatic implementation of interventions to improve adherence to treatment, pharmacovigilance, and capabilities for management of hemolysis as per WHO recommendations when using primaquine without G6PD testing. (Objective 1.2 Plan of Action 2021-2025)	Support implementation of second phase of pharmacovigilance project in Brazil. Other interventions to improve adherence, pharmacovigilance and management of hemolysis developed and implemented.	Colombia and Peru pilot interventions ongoing. A plan with inclusion of some of the adherence and pharmacovigilance activities in Bolivia for its implementation after May 2022. Some of the tools developed in the pilot intervention held in Brazil (mainly envelopes) shared with BA and Guyana colleagues for a similar implementation with miners, to support better		The experience in Brazil strengthening therapeutic adherence and pharmacovigilance to antimalarial treatment in Manaus, Brazil: a multicomponent strategy using mHealth published in Malaria Journal.

			<p>treatment adherence. Planning process for a second phase in Brazil ongoing with corresponding national and local counterparts. Support also provided to Peru for the development of a "cartilla" for the training and use of the Artemether 20 mg - Lumefantrine 120 mg instead of artesunate-mefloquine as a first line treatment for uncomplicated <i>P. falciparum</i> cases by the community workers in the remote areas of Loreto.</p>		
12	<p>Support implementation of recommendations for improving LLIN & IRS coverage and use (compendium) (Objective 1.3 Plan of Action 2021-2025)</p>	<p>LLIN/IRS operational plans (national or subnational level) based on the implementation of VC toolbox developed in 2020</p>	<p>Protocol to implement simplified monitoring of possession and use of LLIN developed. After specific results shared by USAID partners (Vector Link) in Colombia with problems detected in the use of LLINs, support programmed for a communication campaign and actions / materials to improve the use of LLINs in Colombia. Technical support and supervision in the installation of mosquito nets and application of indoor spraying in the municipalities of Puerto Lempira and Wampusirpi in Honduras. Selection and prioritization of vector control interventions in main malaria foci in Dominican Republic and</p>		<p>Protocol for simplified monitoring of possession and use of LLIN. This action has to do with the study on LLIN and IRS effectiveness supported by USAID in Colombia. The preliminary findings of the study have been essential to reinforce the need of urgent improvements in LLIN implementation. PAHO is taking actions based on those findings that will benefit LLIN actions in all the other countries. During the rest of YR6 PAHO will continue working in a complementary effort with USAID partners (CDC, Vector Link) on this matter.</p>

			Honduras using the toolbox developed by PAHO in 2020 in process with national counterparts.		
13	Support the development and strengthening of entomological surveillance strategies in malaria to guide vector control interventions (Objective 1.3 Plan of Action 2021-2025)	Progress developing sentinel sites evaluation and implementing plans for insecticide resistance management.	Support provided for insecticide resistance evaluations in Honduras. Prioritization and planning of actions and needs to conduct entomological surveillance, including resistance studies during 2022-2023 in the Dominican Republic. Preparation of the National Plan for Entomology and Vector Control 2022-2024 (Costa Rica), National Plan for Insecticide Resistance Surveillance and proposal for a Guide or Manual for Entomological Surveillance of Vector Control. Conclusion of the virtual self-learning course in entomological surveillance of malaria and other VBD (Costa Rica). Update of regional information on resistance to insecticides. Development of entomology module in DHIS2 (Honduras).		
14	Support implementation of IVM strategy (Objective 1.3 Plan of Action 2021-2025)	Progress in implementing habitat modification/manipulation interventions in selected foci in high burden municipalities	An approach is being supported in Dominican Republic to identify specific situations and foci that could be addressed with habitat modification/manipulation actions involving other sectors (sugar industry and local irrigation organizations).	Due to the travel restrictions imposed by the COVID-19 pandemic this activity was delayed.	The approach of hatcheries with intersectoral measures of habitat modification seems to be an important element to consolidate elimination in the Dominican Republic. Three scenarios are identified: irrigation system in focus of San Juan, crop canals with the sugar industry, and peri-urban aerial of Santo Domingo.
15	Improve supply chain management of health products, including anti-malarials	Antimalarials country quarterly reports developed	Unfortunately, only a few countries complied with this request due to other priorities imposed by the	Rotation of HR in the countries (national, departmental, and	

	(Objective 1.2 Plan of Action 2021-2025)		COVID-19 pandemic. Annual planning process implemented in collaboration with PAHO's Strategic Fund with inclusion of current stocks by Member States, a good source that can complement the country reports.	local levels) is a big challenge in this area.	
16	Support malaria staff (Objective 1.1, 1.2 Plan of Action 2021-2025)	Staff hired	Advisor, Malaria Diagnostics and Supply Management in place. Vacancy during the period for Specialist, Malaria Surveillance which is under recruitment.		Specialist, Malaria Surveillance was vacant during the period and is under recruitment. Activities under this position were redistributed and covered by consultancies.
Outcome 2.2: Increased country capacity to reinforce malaria surveillance towards evidence-based decision making and response.					
Principle Intervention 2.2.1 Support countries to reinforce malaria surveillance towards evidence-based decision making and response.					
1	Improving outbreak response and strengthening surveillance at local levels (Objective 3.2, 2.2 Plan of Action 2021-2025)	Support in improving local surveillance in high burden municipalities or areas experiencing increase in cases	Technical support to organize the response to the Kaukira outbreak in Honduras and the increase in cases in outbreaks in Ecuador and the Dominican Republic (San Juan). Supported local actions in response to malaria transmission in Los Chiles (Costa Rica). Support provided for training in Andoas, Peru in February 2022, a total of 33 "Agentes Colaboradores" were trained to improve local surveillance and case management. Technical cooperation on foci investigation in the gold mining areas and Amerindian villages reporting cases (Alalapadu, Mamaini, Apetina) in Suriname and assistance to outbreak preparedness and response.		Due to the effects of COVID-19 in the health sector and recent political changes, as well as the malaria epidemic in Nicaragua, Honduras is facing an unusual increase in cases in the Mosquitia region. PAHO has identified basic flaws in malaria actions that were not sustained during 2021.
2	Development of microstratification plans with tailored strategies	Reports of progress on microstratification and implementation of foci-lead	Updating of microstratification exercises and organization of the	Travel restrictions due to the COVID-19 pandemic limited the	

	<p>promoting “early detection, timely investigation and prompt response”</p> <p>(Objective 2.1 Plan of Action 2021-2025)</p>	<p>approach in selected areas (including other forms of sectorization to organize the local malaria response)</p>	<p>operation in priority foci and border foci (Honduras, Suriname, the Dominican Republic, Colombia, Costa Rica, and Ecuador). Technical document of hypotheses of transmission in malaria foci in Panama. Pilot experience with the microstratification strategy in Region 7 (Guyana). Support provided on microstratification and microplanning of malaria in localities of the Beni and Pando Departments in Bolivia. Support to implement DTI-R in rural communities in Peru.</p>	<p>ability to place international HR at the field level in some cases. In these instances, work has been completed with the support of national HR.</p>	
3	<p>Provide trainings at local level to improve quality of case and foci investigation in countries, including plans for foci characterization and response and the implementation of microstratification plans</p> <p>(Objective 2.1 Plan of Action 2021-2025)</p>	<p>Trainings of local teams and subnational levels in implementing microstratification and other key changes on malaria operations</p>	<p>Trainings conducted in Region 7 in Guyana and Andoas, Peru. Training program for foci managers with learning-by-doing and in-service methodology (Dominican Republic). Training and support to establish foci managers / foci management teams (Ecuador, Dominican Republic, Guatemala). Technical assistance for the annual/refresher training of the Malaria Service Deliverers on malaria prevention during the COVID-19 pandemic (Suriname).</p>		
4	<p>Support implementation of methodology for verification of the quality of surveillance system in malaria.</p>	<p>Report of progress for evaluation of zero cases at subnational level and subnational verification processes available</p>	<p>Implementation of case evaluation methodology in Suriname, Ecuador, and Colombia.</p>		

	(Objective 3.3 Plan of Action 2021-2025)				
5	Update Regional and Global database to support preparation of a regional malaria report and online dashboards (Objective 3.2 Plan of Action 2021-2025)	Updated database and regional report developed	2020 case reporting process with all endemic countries and collaboration with WHO for the preparation of the World Malaria Report 2021. Verification of 2020 country profiles in process. 2021 case reporting process initiated. Draft document on the status of the malaria situation in the Americas 2020. Proposal to organize the dissemination of information and the PAHO regional data repository.	During the second year of the pandemic, there were challenges in reporting cases, especially from non-endemic countries.	Information from the Americas for the WMR. Draft malaria situation in the Americas 2020.
6	Support strengthening of epidemiological analysis including the use of tools like nominal and relational databases (Objective 3.1, 3.2 Plan of Action 2021-2025)	Reports on implementation of DHIS-2 in some countries and the use of dashboards at local level	Elaboration of DHIS2 case management modules in Suriname and pilot implementation support. Pilot support of aggregated data in DHIS2 in Guyana. Development of DHIS2 modules for AQ in microscopy and entomology in Honduras. Development of dashboards for data analysis in DHIS2 in Suriname, Honduras. Routine analysis of case databases in Guyana. Support use of dashboards at the local level in Colombia and Ecuador.	Some countries experienced challenges for hosting the DHIS2 system (Suriname, Guyana). Instability of HR at the local level hinders the implementation of dashboards (Colombia).	The development and adaptation of DHIS2 modules, as well as the development and implementation of dashboards for data analysis, is being complemented with actions of the DATA-SI project with the Global Fund in the countries benefiting from GF and in complementarity with the efforts of other RMEI partners (CHAI, IDB).
7	Support Malaria Staff (Objective 3.1, 3.2, 3.3 Plan of Action 2021-2025)	Staff hired	Vacancy during the period for Specialist, Malaria Surveillance which is under recruitment.		Specialist, Malaria Surveillance was vacant during the period and is under recruitment. Activities under this position were redistributed and covered by consultancies.

Outcome 2.3: Increased country capacity to strengthen strategic planning, monitoring and evaluation; operational research; documentation of best practices, communications, partnerships and collaborations; and tailored approaches to facilitate malaria elimination and prevent re-establishment in malaria-free areas.

Principal Intervention 2.3.1 Support countries to strengthen health systems; strategic planning, monitoring and evaluation; operational research; and country-level capacity building.

1	Update/consolidate/ disseminate malaria strategic/elimination plans in selected countries and the regional malaria elimination Plan of Action (Objective 4.2 Plan of Action 2021-2025)	Plan of Action 2021-2025 dissemination strategy: Online publication, Online interactive tool, Other communication material	Completion and editing of the Regional Action Plan 2021-2025, including indicator targets and baselines. The English version is in the final design stage before being published and the translation to Spanish, French, and Portuguese is in process.	After the review by the TAG in July 2021, the regional team experienced delays due to difficulties in data consolidation to establish the baseline of some indicators, as well as delays in feedback from other units within PAHO. While mostly completed during YR5, pending edits were completed during the first semester of YR6 and the translation and publication process was initiated.	
2	Inclusion of malaria case management into the health system, approaching policy and normative barriers. (Objective 4.1 Plan of Action 2021-2025)	Progress on coordination with health services and primary care programs toward the inclusion of malaria diagnosis and treatment in the health system.	Local actions in foci in several countries to organize malaria care in health services (Colombia, Dominican Republic, Ecuador, Panama, Peru, Costa Rica, and Honduras).	Although progress had been made in promoting integration with health services within MoH structures at the local level, inter-programmatic coordination with the Health Services Unit at PAHO HQ and at country offices and also between MoH actors at the national level has been difficult due to the priorities associated with the COVID-19 pandemic.	
3	Support countries in approaching key gaps in evidence-based policy making process for malaria elimination in the Americas	Report (TAG meeting 2022) with progress on: -Develop a complete set of priority topics based on actual problems in the countries	The official process of forming the new TAG for malaria with six new members is underway. The TAG meeting		

	(Objective 4.2 Plan of Action 2021-2025)	(including those driven by policy priorities). -Connecting research with policy process within the countries, across the Region, and globally.	scheduled for the second half of 2022.		
4	Monitoring regional and national elimination plans (Objective 3.3 Plan of Action 2021-2025)	Development of indicator "fichas" and set of actions to accomplish programmatic targets of the Regional Plan of Action 2021-2025	Evaluation of compliance with Outcome and Output indicators for the 2020-2021 biennium as part of the PAHO Strategic Plan 2020-2025. Establishment of baselines and targets for the indicators of the Regional Plan of Action for Malaria Elimination 2021-2025. Progress in the analysis of the criteria and parameters for each indicator. Preparation of an instrument for the Evaluation of Malaria Programs that integrates PAHO and WHO verification and audit tools.		
Principal Intervention 2.3.2 Support countries on strategic advocacy, communications, partnerships and collaborations.					
1	Support 2021 Malaria Day in the Americas (Objective 4.3 Plan of Action 2021-2025)	Best practices on high burden municipalities (2021) shared by different communication channels	Implementation of the selection process for best practices in high-burden municipalities (La Gomera, Guatemala and Andoas, Peru), documentation, and recognition ceremony during Malaria Day in the Americas, November 2021.		
2	Support preparation of 2022 Malaria Day in the Americas (Objective 4.3 Plan of Action 2021-2025)	Communication material on efforts and progress on malaria elimination actions in high burden municipalities during 2021-2022	During 2022 PAHO is leading the process of rethinking the initiative in coordination with the Malaria Champions secretariat.		
3	Support implementation of Municipalities for Zero malaria initiative (Objective 2.2, 4,3 Plan of Action 2021-2025)	Progress report on malaria interventions and technical cooperation actions in high burden municipalities	Technical support at the local level in high-burden municipalities in Colombia, Honduras, Guyana, Brazil, and Peru.		The Regional malaria team advances efforts to further integrate the initiative into the Strategic Plans of the countries and develop the other components of the original concept note.

4	Manage TAG operations and roster of consultants, including TAG Secretariat activities and follow-up actions (Objective 4.2 Plan of Action 2021-2025)	Report of TAG meeting (2022)	Formal process of formation of the new malaria TAG is in progress with the invitation to six new members. TAG meeting scheduled for the second half of 2022.		
5	Promote strategic approaches for implementing DTI-R and LLIN in gold mining areas (Objective 2.2, 2.1, 4.3 Plan of Action 2021-2025)	Progress on actions on two fronts: -Intersectoral coordination at national levels -Local experiences in selected mining areas	Management within PAHO with the Environmental Determinants of Health Unit to jointly address the issue of malaria and the management of exposure to mercury in artisanal gold mining (Minamata Convention).	Difficulties have persisted in 2022 to prioritize the issue on the agenda of national counterparts.	Progress with the Environmental Determinants of Health Unit at PAHO and the country office refers to a scenario in Colombia. PAHO team will continue advancing the process in Colombia and in communication with USAID in view of the possibility of interacting with other actors of interest due to their role in mining and environmental issues. This activity is also closely related to the actions supported by USAID with BA in Guyana. PAHO will seek to include the approach promoted by BA among the methodological elements for this demonstrative experience.
6	Support Malaria Staff (Objective 4.1, 4.2, 4.3, 2.2 Plan of Action 2021-2025)	Staff hired	Malaria staff in place.		
Principal Intervention 2.3.3 Support countries on focused efforts and tailored approaches to facilitate malaria elimination and prevent re-establishment in malaria-free areas.					
1	Implementation of WHO malaria elimination framework including technical support in key foci and vulnerable populations. (Objective 2.1 Plan of Action 2021-2025)	Reports on implementation and technical cooperation actions: - Malaria risk stratification updated - Microstratification and microplanning - Improvements in passive case detection - Foci manual printed and distributed	Malaria stratification update at the national level (Dominican Republic, Costa Rica). Review of concepts and microstratification approach in Guatemala. Microplanning update (Costa Rica, Colombia, Dominican Republic). Preliminary microstratification exercise held in two municipalities in Bolivia.		
2	Support countries and territories (endemic and malaria-free) in efforts to prevent re-establishment of malaria transmission	Report on actions to prevent re-establishment of malaria transmission	Continued support to El Salvador to implement the recommendations of the WHO Elimination Panel as part of the Reestablishment	The organization of a work agenda with non-endemic countries has been a challenge due to the	Consider support to Antigua and Barbuda in capacity building in microscopy.

	(national and subnational) (Objective 2.3 Plan of Action 2021-2025)		Prevention Plan. Support to Belize to consolidate surveillance capacities by completing in 2021 three years without indigenous transmission of malaria. Trinidad and Tobago, Jamaica, and Barbados included in the last EQAP for malaria microscopy to support malaria diagnosis capacities and quality assurance processes.	persistence of other priorities, especially COVID-19.	
3	Support the implementation of the Plan of Action for prevention of artemisinin resistance in the Guyana Shield (Objective 2.2, 1.2, 4.3 Plan of Action 2021-2025)	Progress on actions towards the elimination of malaria in Guiana Shield, including: -Intercountry and border activities -DTI-R and foci-lead approach -Elimination of <i>P. falciparum</i> in Guyana Shield -Prevention of reestablishment of <i>P. falciparum</i> at subnational level in South America	Meeting on the elimination of malaria in the Guiana Shield to review and reinforce the malaria elimination agenda and coordination of joint efforts. The meeting was held virtually 18-20 October 2021 with participation of malaria program coordinators and other MoH officials from all the GS countries (BRA, GUY, French Guiana, SUR, and VEN). VEN representative participated only the first day with an update of the epidemiological situation. The meeting also included participation of Global Fund, UCSF, WHO staff from the Mekong Subregion (GMS), and Malaria No More (as observers). Updated document for the elimination of malaria in the Guiana Shield.		Working document to guide the update of the Plan for the Elimination of Malaria in the Guiana Shield.
4	Development of a framework for MDA interventions in <i>P. vivax</i> and provide support to specific situations as per PAHO TAG recommendations.	Technical document with guidance on: -Part 1: scenarios and criteria to identify situations where MDA could be indicated -Part 2: protocol for	Development of the protocol for the evaluation of MDA and targeted interventions to accelerate elimination. A generic draft was developed and commented on by some experts. Discussion with WHO		We consider that this material and the approach that PAHO is planning to promote this topic in response to the 2019 malaria TAG recommendations will be consistent with the new recommendations for actions to accelerate elimination that WHO has been developing with a group of experts in 2021-

	(Objective 2.2 Plan of Action 2021-2025)	operational investigation using MDA	(GMP) experts about the methodology for analysis. Currently a statistician from LSTMH is working with the PAHO team on generic criteria for the inclusion of an interrupted time series analysis in the methodology.		including participation from the PAHO malaria team.
5	Support Malaria Staff (Objective 2.2, 2.3 Plan of Action 2021-2025)	Staff hired	Malaria staff in place.		
Principal Intervention 2.4 Increased country capacity to strengthen malaria prevention and control activities towards elimination in Haiti and Guyana					
1	Increase country capacity to strengthen malaria activities in Haiti (GF technical assistance for malaria in Haiti)	Staff hired	Support provided on the implementation of the Malaria Global Fund Grant. Reinforcement of the Malaria Health Management Information System. Reinforcement of malaria case management at community level.	Operating environment characterized by a volatile sociopolitical situation, insecurity, and natural disasters. Underperformance of community health program characterized by shortage of first line malaria treatment drugs and diagnostics rendering idle the ASCPs. Lack of reporting to the national surveillance system by the liberal private medical sector.	

2	Increase country capacity to strengthen malaria activities in Guyana (GF technical assistance for malaria in Guyana)	Staff hired	Collaboration/support provided on the implementation of the Malaria Global Fund Grant in Region 1. In parallel, PAHO has continued the process of piloting the microstratification strategy in Region 7, while supporting the strengthening of malaria case management at the country level. Piloting the use of DHIS2 by the National Malaria Program.		
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Topic 3: Neglected Infectious Diseases

No.	ACTIVITY	Products/ Deliverables	MID YEAR TECHNICAL REPORT 2022		
			Progress during period	Challenges	Remarks
Outcome 3.1: Increased country capacity to develop and implement comprehensive plans, programs, or strategies for the surveillance, prevention, control, and/or elimination of neglected, tropical, and zoonotic diseases					
Principal Intervention 3.1.1: Support countries in the development and implementation of integrated projects, programs, strategies and plans of action for control and elimination of NID					
1	Provide on-going technical cooperation to support the development and implementation of integrated national and/or subnational NID plans of action, strategies and interventions towards the prevention, control, and elimination of NID	Regional NID specialist hired	Ongoing. Having highly qualified staff to provide technical cooperation on NID related subjects is essential for fulfilling PAHO's mission and achieving both PAHO's and WHO's goals.		
2	Support the monitoring and evaluation component of the SAFE strategy for Trachoma elimination	Trachoma Toolkit published in English and Spanish.	A first version of the trachoma toolbox was developed adapting international recommendations to the Region of the Americas context. The toolbox has 4 modules: 1) trachoma rapid		

			assessments, 2) TT-case active finding, 3) monitoring and follow up of TT cases, 4) planning and organization of TT surgery campaigns. The first version was reviewed by trachoma national managers and TT surgeons. An adjusted version was produced at the end of 2021 including the updates on the trachoma grading system published by WHO in October 2020. The toolkit is currently finalized and is being edited.		
3	Regional meeting with national managers of trachoma programs (virtual meeting with interpretation services in Spanish, English, and Portuguese). Includes edition, translation into three languages, designing, and publication of the report of the meeting	Report of the meeting	Five meetings were carried out, one with each of the endemic or suspected endemic countries: Colombia, Guatemala, Brazil, Peru, and Venezuela to discuss the progress and challenges towards trachoma elimination. An additional meeting also took place to discuss topics of general interest for the countries and the Region.		Conclusions and recommendations were sent to each country separately. They are available upon request.
4	Support Honduras in the planning and implementation of the integrated vaccination and deworming campaign in the context of COVID -19	Results of integrated campaigns available	Honduras is planning the integrated campaign, which will take place in the third quarter of 2022.		
5	Regional meeting with at least 10 priority countries to agree on next steps to compile information to support the interruption of transmission of yaws (virtual meeting with interpretation services in English, Spanish, and Portuguese). Includes edition, translation into	Report of the meeting	This meeting is being organized and will take place in the third quarter of 2022.		

	three languages, designing, and publication of the report of the meeting				
6	Regional meeting with at least 10 priority countries to follow up and update their deworming plans towards the elimination of STH (Virtual meeting would require translation services)	Report of the meeting	This meeting is being organized and will take place in the third quarter of 2022.		
7	Dissemination of the microplanning tool for MDA for PCT NTDs in the Americas	Microplanning tool published and available in different languages	The microplanning tool was developed in a joint effort with PAHO and WHO, CDC, USAID and RTI international with the aim of having a tool that would be useful for different countries in different WHO regions. The English version was finalized and is currently in the edition and design processed. It will be published and translated into Spanish.		A webinar, with interpretation into the four PAHO official languages, will be held during the second half of 2022 to launch the tool and present it to the countries.
Principal Intervention 3.1.2: Strengthen regional and national capacities to improve and sustain efforts towards control and elimination of NID					
1	Provide management and financial support for the successful development of NID's workplan	Project Support specialist hired	Ongoing. Having staff dedicated to providing successful management of resources (human financial, etc.) is key to achieving good performance and results.		
2	Implement a survey (household based) to assess the status of schistosomiasis transmission in Dominican Republic	Report on the results and lessons learned from the schistosomiasis survey in Dominican Republic	The survey was implemented in November-December 2021. Children and adults were sampled in the historically known endemic areas for schistosomiasis in Dominican Republic.	The calculated sample size was not achieved, due to some communities' refusal to participate in the survey.	The dried blood samples (DBS), collected on filter paper in both children and adult populations are being stored in adequate conditions in Dominican Republic and should be sent in due course to the CDC to be processed. Once available, the results will be analyzed.
3	Implement surveys to verify status of schistosomiasis transmission Saint Lucia	Report on the results of the survey	A first draft of the protocol is ready but needs to be finalized together with the PAHO office for the Eastern Caribbean Countries (ECC)		Discussions will be held in the second quarter of 2022 to decide whether the survey can be carried out in 2022 or not and proceed accordingly.

			and Saint Lucia's health authorities.		
4	Plan and implement the second surgery campaign for identified TT cases. Start the compilation of information for the dossier to support validation of elimination of trachoma as a public health problem in Guatemala	Report of campaign Dossier developed	Planning for the surgery campaign started in February 2022. The campaign is scheduled to take place in May 2022.		The logistics have been planned and the necessary equipment and supplies are being purchased. Three ophthalmologists from Colombia will provide technical support to the national surgeons.
5	Compilation of historical and epidemiological data on trachoma elimination in Brazil as first step to produce the dossier	Document with the historical and epidemiological data developed	Ongoing. The second phase of the compilation of information for the dossier is expected to be completed by the end of 2022.		
6	Maintain and update the NID online courses in PAHO's Virtual Campus for Public Health.	Online courses for Soil-Transmitted Helminths, Schistosomiasis updated and available online at Virtual Campus for Public Health.	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, are being revised and updated. The online course on "Control of Taeniasis" was maintained and is currently available.		The virtual course on control of STH is being updated to include the STH goals for 2030, the strategies to reach women of reproductive age, MDA microplanning, and methodologies for monitoring and evaluating programs such as monitoring of drug efficacy, sentinel site surveillance, among other important updates. This activity is still in progress and expected to be finalized by the end of 2022.
Principle Intervention: Principal Intervention 3.1.3: Scale up and maintain high coverage of integrated preventive chemotherapy through the implementation of surveillance, monitoring and evaluation actions for NID.					
1	Provide technical cooperation in the area of NID related epidemiology	Regional NID epidemiologist hired	Ongoing. Having highly qualified staff to provide technical cooperation on NID related subjects is essential for fulfilling PAHO's mission and achieving both PAHO's and WHO's goals.		
2	Implement surveillance survey in the two trachoma endemic districts; implement an only-TT survey in one district, and carry out trachoma rapid assessments in selected	Report on the results of the surveys and the rapid evaluations	The protocols for these surveys are being reviewed and finalized.		

	communities outside of the known trachoma endemic areas of Guatemala				
3	Implement trachoma surveys in at least three out of the 10 evaluation units of Venezuela	Supplies purchased, field teams trained, surveys implemented	The protocol is being developed. It is expected that the survey will be implemented in one evaluation unit during the second half of 2022.		
4	Compilation of epidemiological information to support the interruption of transmission of yaws in Ecuador: support the implementation of serological survey in the former endemic area, and literature review to support the interruption of transmission in other areas of the country.	Document with the results of the survey, and the literature review report	The epidemiological information is being compiled and the survey is being planned.		
5	Setting up, launching, and maintaining the NID Data Collaborating Sites for countries implementing preventive chemotherapy actions to eliminate NID. Includes automation of JAP forms packages, online reports, and visualization of data.	Report of the Collaborating Sites	Ongoing. The NID Data Collaborating Sites are being constantly maintained and updated. There has been progress on the automation of JAP form packages and online reports.		
6	Support Paraguay in the implementation of STH sentinel surveillance	Report of the sentinel surveillance results implemented	The development of the protocol is in an advanced stage. The survey is expected to be carried out in the second quarter of 2022.		

Topic 3: Lymphatic Filariasis Elimination in Guyana

	ACTIVITY	Products/ Deliverables	MID YEAR TECHNICAL REPORT 2022
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			Progress during current period	Challenges	Remarks
Principal Intervention: 1. Post-MDA Evaluation of elimination in Guyana					
1.1	Develop a protocol to implement preTAS 2021 and define EUs to implement TAS1- 2022	Protocol for Pos-MDA evaluation	The protocol for preTAS was developed with a focus on 26 hotspots in 13 assessment units in six endemic regions (2,3,4,5,6 and 10). In each hotspot a total of 300 people would be evaluated. Regions 1 and 7 were exempt from preTAS.		
1.2	Request donation of FTS for preTAS	FTS cards	Guyana requested a total of 312 kits from the WHO in August 2021.		
1.3	Purchase supplies to implement preTAS 2021	Required supplies	All supplies were purchased and available for the start of preTAS.		
1.4	Training survey teams to implement preTAS	Trained teams	A total of 74 healthcare professionals were trained for preTAS.		
1.5	PreTAS data collection	Data collected	During November and December 2021, the Pre-IDA Survey was conducted in regions 2,3,4,5,6, and 10		
1.6	PreTAS data analysis and report	PreTAS report	Preliminary results show that 7761 people were evaluated with a total of 114 positive FTS. Of these 114 positive FTS, to date, 5 people have had positive microfilaremia. Of the 6 regions evaluated, 5 "passed" the preTAS, and will join regions 1 and 7 on TAS that will be held in the 3rd or 4th quarter of 2022.		
1.7	Develop a protocol to implement TAS 1	PreTAS report	The TAS protocol is being developed jointly with the Guyana Ministry of Health, PAHO, WHO, CDC, Task Force for Global Health, Lancaster University and USAID.		
1.8	Purchase supplies to implement TAS1 2022	Required supplies	The necessary supplies will be acquired at the end of the 2nd quarter of 2022.		
1.9	Training survey teams to implement TAS 1	Trained teams	The trainings are scheduled to be held at the beginning of the 3rd quarter of 2022.		
1.10	Implementation of TAS 1 -2022	TAS 1 report	The TAS is scheduled for the end of the 3rd quarter or the beginning of the 4th quarter of 2022.		
1.11	TAS 1 data analysis and report	TAS 1 report	Results and reports are expected by the end of the 4th quarter of 2022.		
Principal Intervention: 2. Strengthening of the LF Morbidity Management and Disability Prevention					
2.1	Estimate number of patients per IU using combined data sources	Estimated LF patients per IU	Guyana inserted questions to identify patients in endemic IUs in the activities of the MDA and in the different surveys. The identification of patients needs more attention so that the country can serve the entire population requiring the minimum package of care.		
2.2	Strengthen health services will ensure minimum package of care to patients	Ensure basic package of care to all patients	Region 4 was informally evaluated using the Direct Inspection Protocol by the CDC and obtained a score of 12 out of 14. This same infrastructure should be applied in regions where chronic cases are identified.		

2.3	Develop the situation analysis report	Situation analysis report	The analysis of the situation has not yet been finalized, as soon as the report is finalized it will be prepared and made available.		
2.4	Create job aids for clinicians to support management of LF	HW trained and educational materials available	The job aids are available but just for some of the healthcare professionals, they will need to be modified to be distributed to the clinicians.		
2.5	Create information, education, and communication materials for patients	Patients informed	The communication material was created at the beginning of the MDA in 2019, but according to experts' opinions, in a recent meeting, it needs to be updated according to the distribution of chronic cases.		
Principal Intervention: 3. Developing the dossier to validate LF elimination as a public health problem and implementation of post elimination surveillance					
3.1	Develop and implement strategic plan to achieve and maintain NID elimination in Guyana	NID strategic plan of action	The country hired a consultant, and it is in the process of developing an integrated strategic plan for NIDs.		
3.2	Compilation of data sources according to dossier template	LF dossier	It is planned to hire a consultant later in 2022 who will help Guyana's LF program collect data for the dossier.		
Principal Intervention: 4. Technical cooperation support					
7.1	Provision of technical support for the implementation of the overall national strategy for LF elimination and to design the monitoring and evaluation plan.	Technical reports, technical cooperation mission reports	During the reporting period, PAHO constantly and intensively provided technical cooperation to Guyana's LF elimination program. It supported the program in the planning, acquisition of supplies, and implementation of the new protocol for the pre-IDA impact survey (preTAS), as well as in the training of healthcare professionals who worked in preTAS, in the purchase of supplies, in the execution and analysis of the preliminary results.		

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

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.					
No.	Activity	Products/Deliverables	MID YEAR TECHNICAL REPORT 2022		
			Progress during current period	Challenges	Remarks
1	Develop a set of indicators for Maternal Near Miss (MNM) that allows for measuring inequalities.	Indicators defined, validated and available for use (in Spanish and English)	Consultant hired. The conceptual framework of the dashboard of indicators to be developed was designed and approved. The developing of the indicators (in Spanish) in the Perinatal Information System began.	Process on track	No changes are expected
2	Produce an automatic "one click" report on Maternal Near Miss Indicators for countries that use SIP+ as a maternal-perinatal clinical record	Automatic "one click" report on Maternal Near Miss Indicators (available in English and Spanish)	Development of "one click" indicators in progress. Development of user manual to interpret the results in process.	Process on track	No changes are expected
3	Strengthen the capacities to analyze the MNM, focusing on inequities.	PAHO guidelines for auditing MNM cases with a focus on inequalities (Spanish version)	Consultant hired. Guidelines in progress. It is expected that the final version of the document (in Spanish) will be available in July 2022.	Process on track	No changes are expected
		Tutored virtual course for the auditing of MNM cases validated and ready to be used (available in Spanish)	The conceptual framework of the course has already been developed and validated with participants from the MoH and the SNS of the Dominican Republic. It is pending to include the contents of the MNM audits, which will be added once the PAHO guidelines are ready.	Process on track	No changes are expected

4	Promotion of PAHO recommendations for the implementation of national MNM surveillance systems	At least three countries receive technical support to develop processes for implementing a national system for MNM surveillance	Two countries, beneficiaries of the USAID grant, (Dominican Republic and Peru) have received technical support to develop national surveillance systems for Maternal Near Miss. Paraguay has also recently requested support and will be incorporated in the second part of Year 6.	Process on track	In addition to Paraguay, other countries will probably receive technical support in the second part of Year 6.
5	Regional advocacy efforts to strengthen the implementation of nurturing care to newborns and prevent adverse neonatal outcomes and disability, mainly focused in small and sick newborns. Target audience includes families and civil society. Prematurity greatly contributes to the burden of mortality, disease and disability and CLAP is undertaking work to estimate this burden in LAC.	Technical document (with stories, narratives, pictures and voices of parents and children/adolescents who were born prematurely) and with quantitative results on the burden of disability	Interviews and testimonies were obtained from families and parents from LAC countries regarding caring newborns. They were consolidated in a video that was part of a newborn health campaign.	The activity is being implemented as expected.	Based on the video and testimonies, the next step will be to develop the document planned. Video available at: https://www.paho.org/es/campanas/campana-28-dias-salud-recien-nacido
		Multilingual webinar to present the results with policy makers, legislators, and other stakeholders	A webinar was coordinated in February 2022. The webinar presented 10 key policy actions to be implemented.	The activity is being implemented as expected.	Based on the key policy actions, the process will involve as next steps the discussion and design of a road map at regional and country level.
6	Assessment of EWEC LAC and WGs (MMWG and PSIWG) as an interagency platform aimed at identifying possible areas for improvement or changes needed to protect achievements and increase the efficacy and effectiveness of the movement for the next phase / plan.	Assessment Report of the EWEC LAC as an interagency platform (EMC).	After a process with the PAHO procurement office a company that will conduct the assessment was hired in November 2021. PRECISION delivered the tool and instruments for the assessment by December 2021. Currently the company is setting the meetings to interview and conduct surveys among EWEC LAC members and key partners.		The main product developed by the constancy was the tools and instruments to develop the assessment. The next product would be the results of the interviews and the surveys and the final product the report containing the recommendations.

7	Support the execution of activities of the interagency mechanism EWEC LAC	EWEC LAC workplan was executed via the support of a hired consultant (EMC).	A consultant was hired to support the development of the working groups and EWEC LAC activities starting October 2021 to December 2022 and to avoid interruptions during the handover of the secretary from UNICEF to PAHO. In January 2022 a consultant already working for PAHO was given the responsibility to support in the daily basis logistics of the EWEC LAC, including scheduling meetings and developing minutes and reports.		The main products developed were the minutes from the bimonthly meetings with EWEC LAC members.
8	Strengthen the equity-based approach in the COMISCA countries.	Plan of action developed and adopted to follow up on the Estudio Regional de Equidad y Fecundidad en Adolescentes (EREFA) recommendations. (MMWG and PSIWG)		A recent change in the SE-COMISCA administration contributed to some delay in follow-up actions, but activities are to be resumed shortly.	
9	Interagency regional advocacy to implement recommendations generated by the study on the impact of COVID-19 on maternal mortality and neonatal mortality	A synthesis report, two infographics (PSIWG)	The studies are still in progress		
10	Conduct equity-based analysis of SDG-3 indicators for the age group 15-24 years using available survey data (MICS, DHS, etc)	Equity-based analysis of SDG-3 indicators for the age group 15-24 years using available survey data (MICS, DHS, etc)(technical support from Federal University of Pelotas) (MMWG)	The draft report was prepared by MMWG and is currently being reviewed by PSIWG members.		

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

No.	Activity	Products/Deliverables	MID YEAR TECHNICAL REPORT 2022		
			Progress during current period	Challenges	Remarks

1	Continue ongoing application of PAHO/WHO's methodology to conduct access barriers assessments and identification of policy options in selected countries in coordination with health authorities and academic partners. Continue ongoing contract of consultant.	Regional publication and peer-reviewed articles highlighting regional and country case studies conducted from YR4 to YR6, including lessons learned and application of findings in action plans	a) HSS received approval and editorial recommendations from the Pan American Journal of Public Health (PAJPH) on the publication on barriers to access reported by women in the Region of the Americas; b) three additional draft manuscripts showcasing case country studies and lessons learned from implementing a mixed-method methodology to analyze access barriers are under development; c) the initial proposal for a regional publication has been internally approved, and the development process is on-track and programmed for the second semester of YR 6.	The emergence of the omicron variant of COVID-19 in the region demanded full-time attention of national health officials. Some of them are key stakeholders for implementing the activities included in the working plan. This required adaptation of timelines and the technical cooperation modalities to continue using virtual platforms and tools.	Under the prospect of a new agreement, HSS is conducting access barriers analysis in the Dominican Republic and Colombia in close collaboration with health authorities who are using preliminary results as inputs for developing action plans to strengthen essential public health capacities
2	Analysis of barriers related to implementation of socially accountable education and interprofessional practice at the first level of care	Report on the barriers related to implementation of socially accountable education and interprofessional practice at the first level of care. A chapter will be added on the effects of Covid-19 pandemic and emerging tendencies in those areas	A scoping review on barriers due to regulation and accreditation processes among health professions in the Americas is underway and it will be added to the package of products generated under this line of the grant.	The emergence of the omicron COVID-19 variant in the Region demanded full-time attention of many of our national and international counterparts. This required adaptation of timelines for YR6.	
3	Support implementation of the Adolescent Well-being Framework in LAC	Countries having Implemented the Adolescent Well-Being Framework (PSIWG)	A meeting was held between the EMC and PMNCH, during which in-depth discussions were held on the promotion of the Adolescent Well-Being Call to Action. One option includes writing a letter from EWEC to LAC countries, to promote adoption of the Call to Action.		

4	Promote and support interagency actions to mitigate the direct and indirect consequences of COVID-19 on WCA.	Identification and implementation of key actions (technical briefs, webinars, and other activities) oriented to mitigate the direct and indirect consequences of COVID in WCA in the region (MMWG & PSIWG)	A webinar was held in March to present and discuss strategic actions to mitigate the direct and indirect consequences of COVID-19 on young people. 400+ persons attended the webinar, and the recording was shared with all the 800+ persons who registered for the webinar.		
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Strategic Line III: Ensure the identification and promotion of practical solutions to reach those being left behind, addressing social inequities in health.

MID YEAR TECHNICAL REPORT 2022					
No.	Activity	Products/Deliverables			
			Progress during current period	Challenges	Remarks
1	Promote cooperation and knowledge sharing across countries on ways to assess access barriers and application of findings in decision-making processes. Continue ongoing contract of consultant.	Regional webinar workshop showcasing findings from country studies and with participation of health authorities and key stakeholders.	HSS has prepared a concept note and programmed a regional webinar for YR6's second semester to introduce the results of country studies and share lessons learned and recommendations with health authorities and key stakeholders.	N/A	
2	Disseminate and implement existing virtual course on social accountability and interprofessional practice for primary care in underserved areas	Report on the implementation and impact of the virtual course in the Region. A module on the impact of the Covid-19 pandemic and emerging tendencies on health professions education will be added	Completion of the module on the impact of the Covid-19 pandemic and emerging tendencies on health professions education is underway. Adaptations of the course on social accountability into Spanish and Portuguese have been initiated.	The emergence of the omicron COVID-19 variant in the region demanded full-time attention of many of our national and international counterparts. This required adaptation of timelines for YR6.	

3	Promote South-South cooperation on socially accountable and interprofessional practice to improve the health of women, children and adolescents living in situations of vulnerability	Dissemination of good practices and emerging tendencies in the transformation of health professions education to face inequalities via participation in regional forums/meetings.	PAHO has prepared a concept note and programmed a regional webinar for the second semester to disseminate with health authorities and key stakeholders the final products developed under this particular line of the grant, together with lessons learned and recommendations.	See comment above	
4	Scale up experiences and lessons learned from previous years on performing perinatal death review. Based on the experience obtained in the Eastern Caribbean, disseminate the document on lessons learned and implement a similar experience in 3 priority countries aimed at implementing mechanisms for establishing a perinatal death audit and review system.	a) Technical document presenting process and lessons learned disseminated, b) Three additional countries with a regular audit and review system in place;	The outline of the technical document presenting the process and lessons learned was finished. The process of coordinating a training session in Bolivia has already started to provide training and start implementing perinatal audits and reviews regularly.	Commitment and sustainability at country level may be a challenge. Still, the activity is expected to be successful as countries are experiencing increases in neonatal mortality after the pandemic	The work plan will continue as initially defined
5	Implement assessment and planning of newborn care quality improvement in health facilities, based on participatory approach. Based on the content contained in the on-line course designed during 2021 on the Assessment of Essential Conditions (VCE in Spanish), additional focused technical support will be provided to three	a) Selected countries receive training on the Assessment of Essential Conditions (VCE) in selected health facilities where it is then later applied; b) Technical document presenting process, results and lessons learned	The visual design and content of the online training course was completed. Final adjustments and upload to the PAHO Virtual Campus will be completed in the coming weeks.		The work plan will continue as initially defined. Once the online course be uploaded, the second phase, involving the dissemination and promotion of the course at country level will start.

	priority countries and selected health facilities				
6	Development of tools and strategies aimed at reducing the impact of newborn sepsis. Design and test a set of indicators and an assessment tool (control panel with automatic calculation) to assess structural and procedural aspects related to preventing newborn sepsis in health facilities as one of the main causes of death; implement and test the set of indicators and tool in the field; Dissemination to countries at the regional level.	Assessment tool developed, tested, and disseminated	The tool, indicators, and instructions for implementation have been developed. The technical panel for validation is planned to be coordinated during May 2022	No delays have been experienced.	The work plan is expected to continue as initially planned
7	Support countries in engaging communities to address barriers to care during and beyond the COVID-19 pandemic	Brief: Engaging communities to address barriers to care during and beyond the COVID-19 pandemic	This product was delayed until July 2022		
		Strategic dialogue with national and local stakeholders oriented to engage communities to address barriers to care	The dialogue will be conducted once the concept document is ready in July 2022.		

8	Publication: Identifying policies and interventions in place oriented to address, reduce, mitigate and monitor access to health services across the life course.	Document developed/published: Identifying policies and interventions in place oriented to address, reduce, mitigate, and monitor access to health services across the life course.	This product was delayed until July 2022		
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Topic 7: Health Information Systems

No.	ACTIVITY	Products/ Deliverables	MID YEAR TECHNICAL REPORT 2022		
			Progress during current period	Challenges	Remarks
Outcome 7.1: All countries have functioning health information and health research systems					
Principle Intervention	7.1.1: Support the development and implementation of PAHO's Plan of Action for Strengthening Vital and Health Statistics and Health Information Systems				
1	Apply the results of the IS4H maturity level assessment tool in the context of national plans and strategies for IS4H and digital health and in the process of digital transformation of governments.	Recommendations provided to targeted countries, including a regional assessment report	Technical cooperation activities are in progress in several Member States. Activities are related with the results of the Maturity Assessment and their strategic recommendations. Virtual sessions were conducted with more than 60 people per country.	No big challenges were identified. However, face-to-face discussions are much better for strategic thinking discussions and decision-making.	N/A
2	Continue developing IS4H and digital health tools and methodologies with a particular focus in the application of the Digital Transformation policy that will be endorsed by PAHO's Governing Bodies	Digital health and IS4H tools and methodologies available on PAHO's IS4H portal	There is significant progress in the development and application of Digital health and IS4H tools and methodologies available on PAHO's IS4H portal. All tools and in the process to be translated into the four official languages of the Organization.	No big challenges were identified. However, it is always important to ensure avoiding duplications with tools prepared by other institutions.	It was interesting to see the big number of downloads related to these tools. More than 50,000 to date.

3	Evaluate country health information systems with emphasis on measuring the SDGs and in view of the 2030 agenda.	Recommendations provided to targeted countries	All maturity assessments are being conducted with a strong emphasis in disaggregated data collection and taking into consideration the monitoring process for the SDGs, among others. A specific tool called "Critical data gathering" was developed.	To ensure avoiding duplications with actions undertaken by other institutions.	N/A
Principle Intervention:	7.1.2: Strengthen country capacities related to HIS				
1	Assess countries' vital statistics systems, with a subnational focus, using the adapted maturity model tool and other tools and available information	8 country assessment reports with recommendations	All maturity assessments are being conducted with a strong emphasis in Vital Statistics. An important MoU was signed with Vital Strategies with the aim of ensuring a more expanded collaboration on Vital Statistics. Assessment reports are in progress and being discussed with national authorities.	The main challenge is that Vital Statistics is not always under the administrative authority of the health sector.	N/A
2	Conduct an analysis of open health data sets from across the region to identify gaps and provide recommendations to ministries of health	Analysis and recommendations available on birth certificate forms used in the Americas	Region-wide analysis of open health data sets from across the region was conducted.	Availability of online data sets in different portals.	N/A
3	Pilot Toolkit for Vital Statistics that includes materials and statistical analysis methodologies for VS data, which includes inequalities measurements, to support subnational teams.	Selected countries (2-4) in the Caribbean and Latin America will be pilot testing the toolkit.	There is no progress yet on this module.		
4	Develop tools and methodologies to facilitate the incorporation of data science methodologies in the public health sector.	Tools and recommendations tailored to country needs	Tools and methodologies to facilitate the incorporation of data science methodologies are under development with focus on the use of AI solutions.	Since data science is something new for public health, there is always a challenge in adopting new concepts.	N/A

Principle Intervention:		7.1.3: Strengthen the RELAC SIS Network's capacity to create educational resources for the improvement of HIS			
1	Develop one training module on self-learning focused on interoperability	Training module on open data, including interoperability aspects, available on PAHO's Virtual Campus	Training module on interoperability aspects was developed and conducted to Bolivia. Still working on the process for uploading the content on the Virtual Campus	To ensure avoiding duplications with actions undertaken by other institutions such as HL7.	N/A
2	Develop one training module on self-learning focused on Data Science	Training module on open data, including Data Science aspects, available on PAHO's Virtual Campus	There is no progress yet on this module. We started discussions with a PAHO/WHO Collaborating Center on Data Science and the course will be prepared next semester	N/A	N/A
Principle Intervention:		7.1.4: Foster collaboration between RELAC SIS, regional initiatives (e.g. EWEC-LAC), partners, and specialized PAHO programs that support improvements in maternal and newborn morbidity and mortality surveillance			
1	Implement permanent forums to disseminate methodologies and strategies to measure inequities among PAHO SP indicators, pertaining primarily to maternal and newborn health	Forum deliverables and reports implemented and disseminated through the RELAC SIS portal	No reporting submitted		
2	Conduct missions and capacity-building activities in 6 countries to strengthen the analytical capacity of health personnel for maternal and newborn morbidity and mortality surveillance at the national and sub-national level	Personnel trained in surveillance methods	No reporting submitted		

3	Conduct technical missions to reinforce country capacities to implement a methodology for the intentional search and reclassification of maternal deaths (BIRMM, by its Spanish acronym)	Personnel trained in the BIRMM methodology	No reporting submitted		
		Mission reports and recommendations available	No reporting submitted		
4	Conduct a subnational-level inequality study using data from the Latin American Perinatology Center's (CLAP) perinatal information system (SIP, by its Spanish acronym)	Subnational-level inequality study conducted	No reporting submitted		