



USAID-PAHO UMBRELLA GRANT AGREEMENT 2016-2021

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

ANNUAL REPORT

OCTOBER 2018 - SEPTEMBER 2019

REPORT DATE: OCTOBER 31, 2019



PAHO



USAID
FROM THE AMERICAN PEOPLE

KEY TECHNICAL PERSONNEL

ADRIENNE COX (EIH)
AMALIA DEL RIEGO (HSS)
ANALIA PORRAS (HSS)
ANA LUCIANEZ (CDE)
ANTONIO SANHUEZA (EIH)
BREMEN DE MUCIO (CLAP/SMR)
ERNESTO BASCOLO (HSS)
ENRIQUE VEGA (FGL)
ISABEL ESPINOSA (FGL)
JOSE GARCIA GUTIERREZ (HSS)
LUIS GERARDO CASTELLANOS (CDE)
MARCELO D'AGOSTINO (IEH)
MARIA PAZ ADE (CDE)
MARTHA SABOYA (CDE)
PABLO DURAN (CLAP/SMR)
PATRICIA RUIZ (EIH)
PEDRO AVEDILLO (CDE)
RAFAEL LOPEZ OLARTE (CDE)
ROBERTO MONTOYA (CDE)
SANTIAGO NICHOLS (CDE)
SUZANNE SERRUYA (CLAP)
GRANT MANAGER – MARCOS ESPINAL (CDE)
GRANT COORDINATOR – HANNAH KURTIS (CDE)

TABLE OF CONTENTS

1. LIST OF ACRONYMS AND ABBREVIATIONS	4
2. PROJECT SUMMARIES: ACHIEVEMENTS, KEY ACTIVITIES, LESSONS LEARNED AND CHALLENGES.....	6
TOPIC 1: TUBERCULOSIS	6
TOPIC 2: MALARIA.....	8
TOPIC 3: NEGLECTED INFECTIOUS DISEASES.....	11
TOPIC 4: NEONATAL HEALTH.....	14
TOPIC 5: MATERNAL HEALTH	16
TOPIC 6: INEQUITY ACROSS THE LIFE COURSE	18
TOPIC 7: HEALTH INFORMATION SYSTEMS.....	20
TOPIC 8: HEALTH SYSTEMS STRENGTHENING.....	22
3. INTER-PROGRAMMATIC EFFORTS.....	30
4. PROGRESS TOWARD GRANT OUTCOME INDICATORS	32
5. PRODUCTS DEVELOPED DURING CURRENT PROJECT PERIOD	39
6. PAHO-USAID COLLABORATION SUCCESS STORIES	45

1. List of Acronyms and Abbreviations

ACT	Artemisinin-based combination therapy
ALAPE	Latin American Association of Pediatrics
BIRMM	Intentional Search and Reclassification of Maternal Deaths
CC	PAHO/WHO Collaborating Centers
CBE	Competency Based Education
CDC	Centers for Disease Control and Prevention
CDE	Communicable Diseases and Environmental Determinants of Health Department
CHAI	Clinton Health Access Initiative
CHW	Community Health Workers
CLAP	Latin American Center for Perinatology
CRIV	Combined Requisition and Issue Voucher
CRMA	Caribbean Regional Midwives Association
DTI-R	Detection, Treatment, Investigation and Response
DST	Drug Susceptibility Testing
EIH	Evidence and Intelligence for Action in Health Department
ENAP	Every Newborn Action Plan
EQAP	External Quality Assurance Program
EWEC-LAC	Every Woman Every Child
FIGO	International Federation of Obstetrics and Gynecologists
FLASOG	Latin American Federation of Obstetrics and Gynecologists
FLO	Latin American Federation of Midwives
FGL	Family, Gender and Life Course Department
GHED	Global Health Expenditure Database
GTR	Regional Task Force on Maternal Mortality Reduction
HIS	Health Information Systems
HIV	Human Immunodeficiency Virus
HSS	Health System Strengthening Department
ICD	International Classification of Diseases
ICM	International Confederation of Midwives
IDA	Triple-drug treatment regimen
IDB	Inter-American Development Bank
IPE	Interprofessional education
ISAT	Indicators for Social Accountability Tool
IS4H	Information Systems for Health
LAC	Latin America and the Caribbean
LF	Lymphatic Filariasis
LMIS	Logistic Information Management System
MCPC	Managing Complications in Pregnancy and Childbirth
MCSP	Maternal Child Survival Program
MDA	Mass Drug Administration
MDR-TB	Multidrug-resistant Tuberculosis
MDSR	Maternal Death and Severe Maternal Morbidity and Response
MDGs	Millennium Development Goals

MMU	Materials Management Unit
MMWG	Metrics and Monitoring Working Group
MOH	Ministry of Health
MOC	Ministry of Communities
MoPH	Ministry of Public Health
MPDSR	Maternal and Perinatal Death Surveillance and Response
NID	Neglected Infectious Diseases
NTP	National Tuberculosis Program
PAHO/WHO	Pan American Health Organization/World Health Organization
PAJPH	The Pan American Journal of Public Health
PLISA	Health Information Platform for the Americas
PPP	Public Private Partnership Initiatives
RCM	Rapid Coverage Monitoring
RDTs	Rapid Diagnostic Tests
RELAC SIS	Latin American and Caribbean Network for Health Information Systems
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health
SA	Social Accountability
SP	Strategic Plan
SCH	Schistosomiasis
SDGs	Sustainable Development Goals
SESAL	Honduran Secretary of Health
SIP	Perinatal Information System
STH	Soil-Transmitted Helminthiasis
TAG	Technical Advisory Group
TB	Tuberculosis
TES	Therapeutic Efficacy Studies
TRA	Trachoma Rapid Assessments
TT	Trachomatous Trichiasis
TWG	Technical Working Group
UH	Universal Health
UHC	Universal Health Coverage
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WCA	Women, Children and Adolescents
WHO	World Health Organization
PSIWG	Working Group on Policies, Strategies, Interventions
YAG	Youth Advisory Group

This Annual Report for the Grant Agreement between the Pan American Health Organization/World Health Organization (PAHO/WHO) and the United States Agency for International Development (USAID) covers the period from October 2018 to September 2019 and is divided in five sections. The first section highlights the main achievements, key activities and deliverables, lessons learned and challenges from the third year of this grant; the second section provides some example of inter-programmatic efforts that have taken place as part of the grant, the third section provides an overview of progress toward achieving the outcome indicators as established in the grant agreement; the fourth section provides a list of products developed during the third project period; and the final section includes a compilation of selected public health success stories from across the region which have benefited from the PAHO-USAID collaboration.

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

Topic 1: Tuberculosis

Tuberculosis (TB) continues to be an important public health problem in the region of the Americas with 289,000 estimated new and relapsed cases occurring in 2018, of which 233,500 (81%) cases were reported officially. In 2018, TB was also the cause of an estimated 22,900 deaths. Despite some progress, TB incidence and mortality in countries is affected by poverty, migration, TB/HIV co-infection and other comorbidities (diabetes, malnutrition, and addictions), cultural aspects, late care seeking behavior, and limited access to health services. Key vulnerable populations for TB across the region are people living in the streets, drug users, prisoners, indigenous groups, and children.

The End TB strategy, PAHO's Regional Plan of Action for the Prevention and Control of TB and the commitments of the United Nations General Assembly High Level Meeting on TB held in September 2018, serve as a framework for the interventions that are being implemented and supported through the PAHO-USAID grant. These interventions include increasing capacity for integrated patient-centered TB care and prevention at country level, reinforcing PAHO's technical capacity to support countries, the initiatives of TB control in large cities and TB elimination in low burden countries, and the development of strategies/guidelines to address vulnerable groups.

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

- Increased recognition of TB as a key public health problem and revision of national interventions in the five high burden countries that account for 68% of TB burden in the region through high level visits and follow-up on prior issued recommendations.
- Increased awareness of TB prevention and care through the commemoration of World TB Day.
- Continued efforts to conduct pharmacovigilance of second line drugs in countries.
- Increased involvement of civil society in TB at the regional level and the creation of a coordinating mechanism that not only involves TB but also HIV, Hepatitis and STIs and preparations for capacity building for the implementation of the ENGAGE-TB approach in selected countries.
- A strengthened approach to key vulnerable groups for TB- mainly indigenous people, prisoners and children- through the development of regional guidance, technical support to countries, and regional meetings.
- Better understanding of the TB epidemiological situation and information system in several countries through Epi-reviews conducted jointly with WHO.
- Continued capacity building of new TB country staff through rotations in the TB Center of Excellence in El Salvador and participation in regional training courses on TB epidemiology and DR-TB held jointly with The Union. Likewise, through consultant's training on Epi-reviews.
- Advancements with TB elimination in low incidence countries through a regional meeting.

- Improved TB data analysis through a regional workshop with key countries and collaboration with the PAHO/WHO Collaborating Center on TB epidemiology.
- Strengthening of TB drug management in Argentina, Chile and Peru through capacity building on Quan-TB.
- Implementation of the third pillar of the End TB Strategy fortified through a regional meeting of existing national TB research networks, coordination with technical and financial partners and initial discussions on the creation of a regional TB research network.
- Renewal and strengthening of PAHO's technical advisory group on TB in children and adolescents to support the implementation of the Roadmap towards ending TB in these age groups.

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

- TB monitoring visits to the TB high burden countries: Colombia, Mexico and Brazil and six-month follow up of recommendations made to countries including Haiti and Peru.
- National TB Program and Laboratory Managers' meeting in Guatemala City in November 2018 with participation of 25 countries, key partners, civil society and experts. The meetings meant to update participants on the latest global and regional recommendations, share experiences and identify key aspects that still need to be addressed.
- Capacity building activities: TB epidemiology course in April 2019; multidrug-resistant tuberculosis (MDR-TB) course in July 2019; Quan-TB workshops in Argentina in October 2018 (sub regional) and in Peru in July 2019; and Epi-review consultant's course in July 2019.
- Regional meeting on TB in indigenous peoples held in Colombia in July 2019 with participation of 13 countries and partners. Advocacy for this area of work was achieved and next steps to implement the regional guidance on this topic were identified (the meeting report is being finalized).
- Pilot implementation of guidance document on TB in indigenous peoples in Colombia, Paraguay, Guatemala and Brazil between June and August 2019. (reports are being finalized).
- Development of a peer-reviewed article documenting TB/HIV integration in the region (pending publication).
- Publication and distribution of TB regional report 2018 and initial development of the 2019 report.
- Development of World TB Day materials for 2019.
- Translation of WHO TB documents into Spanish: TB Patient Cost Surveys and Latent TB Infection guidelines (finalized); Compendium of WHO Guidelines, Roadmap on Childhood TB, and new DR-TB guidelines (currently under review).
- Renewal and meeting of the TB Child and Adolescent Regional Group in September 2019. This group provides advice to PAHO on this topic and supports the implementation of the roadmap for ending TB in this age range (report under development).
- Follow up the implementation of the TB in Large Cities initiative in eight countries and introduction of the initiative in Chile.
- Regional meeting on TB research in Brazil in September, where the basis for a regional TB research network and potential funding for operational research was discussed, including partners (report in final review).
- Coordination of the 9th rotation of TB professionals through the Center of Excellence in El Salvador on TB/HIV in May 2019, with participants from five countries.
- Realization of a regional workshop on TB data analysis and use for 10 key countries in Argentina in August 2019.
- Epi-reviews conducted in in Guatemala (February) and Dominican Republic (May).

- Regional meeting on TB elimination in Costa Rica in June with the participation of 10 low incidence countries where next steps to accelerate implementation of the End TB Strategy and the TB elimination framework were discussed (report under development).
- Review and analysis of 22 TB national strategic plans against the End TB Strategy and commitments of the UNHLM on TB.
- Support for the regional TB team: P3 TB Prevention and Control Specialist, administrative assistant and TB fellow

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

- Monitoring visits to countries and regional technical meetings and workshops are key not only to follow up on progress in the implementation of the End TB strategy, but also to advocate for TB prevention, control and eventual elimination, provide guidance, identify technical support needs, and direct dialogue with national counterparts.
- Capacity building activities continue to be essential not only to train new staff and update others, but also to stimulate accelerated implementation of key interventions of the End TB Strategy.
- Addressing TB vulnerable populations and comorbidities is needed for TB elimination in the Americas; despite some progress much technical support is still needed. The approach used to translate global policy into country specific activities is facilitating this process.
- TB data collection and analysis continues to be essential to identify implementation gaps and address them adequately. The activities conducted, including the Epi-reviews and the joint work with the PAHO/WHO Collaborating Center on Epidemiology has enabled this process.
- There is great interest, need and opportunities for TB research in the Region and the activities conducted to date have laid the groundwork for strengthening this area of focus.
- Despite countries having adopted the End TB Strategy, it is still not fully reflected in their TB national strategic plans.

In addition, the following **challenges** to implementation, forced some activities to be modified or postponed to FY2020:

- Changing political situation and health authorities in countries limit or delay implementation of activities.
- Delays in countries' designation processes for participants to be able to attend courses, rotations or meetings. Some spaces and opportunities are unfortunately lost due to these delays.
- Lengthy administrative processes due to competing priorities and timelines at all levels
- Increasingly frequent updates on international guidelines and policies do not allow for timely translation into action at country level.

Topic 2: Malaria

Malaria remains as one of the top priority public health issues across the region. Ministries of Health, supported by PAHO/WHO and other partners, are currently implementing strategies to eliminate the disease and prevent re-establishment in malaria-free areas. However, the increase of malaria transmission since 2015, due to epidemics in some countries and reintroduction of transmission in other areas, shows the vulnerability of the results achieved to date.

PAHO plays a leadership role and provides technical support to countries in the transition towards elimination, currently known as a continuum process. This process involves reorientation of strategies from control to elimination, updating policies and technical documents, strengthening national and local capacities for detection, treatment, investigation and response (DTI-R) including trainings of epidemiologists, surveillance officers, health providers, managers, community workers and vector control staff, as well as strengthening of bi-national collaboration (South-South). These efforts are supported by annual plans that are developed and implemented by national counterparts, in coordination with PAHO.

PAHO has continued to deliver technical collaboration in the areas and activities mentioned above, as well as to provide ongoing guidance to countries in the development/updating and implementation of national strategic malaria plans, in order to ensure that policies and interventions at country level are aligned with the Regional Plan of Action for Malaria Elimination 2016-2020, approved by Member States under resolution CD55.R9, and with the Global Technical Strategy for Malaria 2016-2030 (WHO).

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

- Access to early diagnosis and treatment reinforced as a key intervention. Both eliminating and high burden countries developed actions to include DIT-R strategy in the National Plans for Malaria Elimination.
- Local teams trained and national guidelines developed on the implementation of an approach aimed at addressing operational problems more directly at the local level (micro-stratification and micro-planning)
- Beneficiary countries introduced changes to the national malaria stratification methodology, incorporating new elements from the elimination framework (vulnerability, receptivity, foci)
- All the beneficiary countries are orienting actions using an approach based on addressing main malaria foci. A manual was developed, personnel in the countries are being trained and key foci are being characterized.
- The agreement has contributed in a catalytic manner to the incorporation of these elements in RMEI and Global Fund projects, which will allow expansion of the operational changes.
- These elements were incorporated into technical cooperation with three of the highest-burden countries in South America (Brazil, Peru, and Colombia) and Haiti in line with the WHO concept of elimination as a continuum.
- Increased use of RDTs in various countries and support provided with specificities for selection, implementation, and quality assurance processes of RDTs.
- Quick response to potential outbreaks and stocks-out prevented. Quarterly reports published.
- External Quality Assurance Program (EQAP) 7th panel shipped to participant laboratories to strengthen malaria microscopy diagnosis
- Therapeutic Efficacy Studies (TES) studies conducted in Colombia and Guyana contributed to guiding strategic policies for the containment of resistance in South America. A study conducted in Brazil in coordination with the CDC supported PAHO on proposing changes in *P. vivax* anti-relapse regimens in the Region.
- An initiative was designed and launched to intensify actions in the municipalities with the highest burden of malaria in the Region
- There were changes in Haiti towards the incorporation of diagnosis and treatment by community agents and addressing gaps in diagnosis in the departments with the highest burden, complementing efforts of other initiatives (Malaria Zero and Global Fund).

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

- Twenty-seven (27) people evaluated in competency for malaria microscopy, 100% were certified according to PAHO/WHO criteria for ECAMM.
- Participation of 21 laboratories in the EQAP during the 7th Round, currently results are under analysis, but the preliminary report is available.
- TES studies carried out in Guyana and Colombia. Results presented during the Technical Advisory Group (TAG) meeting and the regional meeting conducted in Manaus, Brazil in August 2019.
- The fourth meeting of the Malaria Technical Advisory Group (Malaria TAG) convened on May 29-31, 2019 to review the progress made and provide guidance on key topics: relapses, drug resistance, *P. falciparum* elimination, mass drug administration.
- Pharmacovigilance and adherence pilot interventions developed with Colombia and Brazil.
- Direct technical support to all eligible countries in malaria stratification, micro-stratification and microplanning as key approaches to achieve elimination.
- Regional meeting on malaria elimination in the Americas held in Washington DC in November 2018, with participation of 19 endemic countries. The meeting followed the submission of the midterm report of the Malaria Plan of Action to the PAHO Directing Council¹. Key elements to increase political commitment as well as operational and strategic changes were discussed with the countries.
- Meeting on malaria elimination in Manaus, Brazil with participation of eight countries and the Global Malaria Program (WHO). Guidance provided to countries on elimination strategies and TAG recommendations.
- Regional workshop with roster of consultants and partners on malaria elimination strategies and guidance. Standardization of concepts and approaches within PAHO consultant and key partners (Inter-American Development Bank (IDB), Clinton Health Access Initiative (CHAI), Global Fund).
- Launching of Municipalities for Zero Malaria initiative in April 2019 and development of technical framework for that initiative.
- Malaria data from the Region updated and included in the World Malaria Report 2018. The World Malaria Report 2019 is currently in preparation. Country data available in PAHO information repositories and on webpage. Several experiences at local level developing operational dashboards based on malaria information.
- Identification of gaps in policies and country regulations to sustain malaria elimination efforts.
- Development of methodology to evaluate situations of zero cases or under-registration of cases at subnational level.

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

- The short duration of epidemiological achievements in malaria-eliminating countries (Costa Rica, Ecuador), reinforces the need to maintain technical capabilities, considering the receptivity and vulnerability of each country.
- Technical support missions to priority malaria foci generate findings and recommendations that have not been previously identified by the central and intermediate levels of malaria programs. Conducting multiple missions to the local level in several countries was essential to validate a methodology for addressing malaria foci in the field.

¹ PAHO's 56th Directing Council. 70th Session of the Regional Committee for WHO for the Americas. Plan of Action for Malaria Elimination 2016-2020. Available at: https://www.paho.org/hq/index.php?option=com_docman&view=download&category_slug=56-directing-council-english-9964&alias=45937-cd56-inf-22-h-e-poa-malaria-937&Itemid=270&lang=en

- Reduction in malaria transmission was able to be achieved in areas that are implementing the approach based on micro-stratification and improvements in access to diagnosis (Gracias a Dios in Honduras, Andoas in Peru, and La Gomera in Guatemala).
- Micro-stratification and foci assessment are dynamic processes (learning by doing) that continue to provide lessons as they are being conducted in countries.
- There are catalytic effects from the PAHO-USAID agreement, which are contributing to the incorporation of key approaches in the RMEI initiative.
- Prevention of re-establishment of malaria at subnational level should be reinforced at the political and technical levels at earlier stages, without waiting for zero cases across an entire country.

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

- Changes in malaria programs' structures and processes and their integration into the health systems continue to be a challenge.
- Weakness of health services structures and primary health care model for hard-to-reach populations is an ongoing challenge. The implementation of malaria case management at the community level with Community Health Workers (CHW) is a challenge as gaps in the health systems prevent CHWs from being incorporated in a sustainable way.
- Social and economic determinants of malaria in the Region: gold mining is a key driver of malaria in South America and other countries (Costa Rica). PAHO is working on developing strategic guidance to approach malaria associated with gold mining.
- Political changes and political instability in some countries during the period imposed a major challenge for technical cooperation.
- The epidemic of malaria in Venezuela overwhelms the country's capacity to respond and continues to be the main epidemiological challenge impeding the achievement of regional goals and threatening efforts of neighboring countries.
- The recruitment process for the malaria advisor in Haiti has taken much longer than expected. The temporary appointment of the alternate candidate as an international consultant was expedited while the selection process was completed.

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 24% of the population of Latin America and the Caribbean (approximately 153 million people) are at risk of NID because they live in poverty.

In September 2016, PAHO's Directing Council, through Resolution CD55.R9, approved the "Plan of Action for the Elimination of Neglected Infectious Diseases and Post-elimination Actions 2016-2022". A mid-term report was presented at PAHO's Directing Council on October 4, 2019 in which progress and challenges were identified².

² PAHO's 57th Directing Council. Plan of Action for the Elimination of Neglected Infectious Diseases and Post-Elimination Actions 2016-2022: Midterm Review. Available at: https://www.paho.org/hq/index.php?option=com_docman&view=download&alias=49639-cd57-inf-10-a-e-poa-neglected-diseases&category_slug=cd57-en&Itemid=270&lang=en

The mission of PAHO's NID Program is to provide technical cooperation to strengthen national capabilities to develop integrated plans of action and implement effective programs, strategies, and interventions to advance towards the elimination (where feasible), or the control of selected NIDs.

In partnership with USAID, PAHO has contributed to the progress made in reducing the burden of diseases that can be targeted through preventive chemotherapy (PC), including lymphatic filariasis (LF), onchocerciasis, schistosomiasis (SCH), soil-transmitted helminthiases (STH) and trachoma. PAHO's Regional NID Program provides technical cooperation to national country programs for the planning, implementation, monitoring and evaluation of integrated interventions, including mass drug administration (MDA), for the diseases mentioned above.

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

- **Lymphatic filariasis: Guyana** carried out a remapping survey in regions I, II, VI, VII, VIII, IX and X. A total of 7,028 children were tested in the six regions. Based on the results, one evaluation unit (EU) was categorized as endemic in Region I (EU1.5), 3 EUs in Region II (EU 2.1, 2.2 and 2.3), 5 EUs in Region VI (6.2, 6.3, 6.4, 6.5 and 6.6) and 1 EU in Region VII (EU7.1). A baseline survey was also carried out in regions III, IV, V and X, where MDA had been implemented since 2016 in order to know the disease status of these areas before implementing the MDA with single-dose, triple-drug treatment regimen (IDA). The results showed that prevalence of LF decreased significantly after two successful rounds of MDA. This survey provided the information needed to identify the LF endemic areas where MDA will be implemented to achieve 100% of geographic coverage in Guyana. It was also an opportunity to update the epidemiological profile of neglected, water and food-borne diseases and to identify immunity gaps of vaccine-preventable diseases to support public health decisions.
- **Elimination of trachoma as a public health problem: Guatemala** enhanced its capacity to identify and operate on trachomatous trichiasis (TT) cases as part of the efforts to reduce TT prevalence below the elimination threshold. **Paraguay** now has the capacities installed to search for trachoma in rural and poor communities in the Chaco region as part of the efforts to confirm the absence of trachoma as a public health problem.

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

- **Guyana** significantly advanced towards the elimination of LF as a public health problem by completing the remapping surveys and by microplanning for the implementation of MDA with IDA in all the endemic regions, with a total target population of 670,000 people in all but regions 8 and 9. The MDA IDA is expected to be launched in mid-October.
- **Peru** advanced with the microplanning for implementing the MDA with a round of azithromycin in its only focus of *trachoma* in the Loreto region. The microplanning is expected to be finalized by the end of 2019. The Ministry of Health has scheduled the MDA for the first quarter of 2020 with domestic funding.
- **Colombia** carried out an MDA for *trachoma* in Vaupes, supported the MDA in Amazonas and Guainía, and trained local health workers to carry out trachomatous trichiasis (TT) active case-finding. Final reports on MDA coverage will be available by the beginning of 2020.
- **Guatemala** completed the active search for ((TT) cases in 50% of the 94 communities in two *trachoma* endemic districts. Forty-two people were operated on to correct TT out of the 90 TT cases identified in the active search. The country will produce a first draft of a protocol to carry out trachoma rapid assessments in areas where it is unknown if trachoma is endemic as part of the process to compile evidence to support a future process of validation of trachoma elimination.

- **Paraguay** has been carrying out *trachoma* rapid assessments (TRA) in communities of two districts of the El Chaco region. With support of the Tropical Data Initiative, a training workshop was carried out to learn how to use the digital platform to collect TRA information. A supervisory mission was completed to the local teams carrying out TRAs and adjustments to the protocol were recommended. No communities have been found with active trachoma in children aged 1-9 years. Additional communities will be evaluated by the end of 2019. More in-depth research will be carried out to characterize the finding of indigenous communities practicing eyelash epilation, likely associated with traditional practices, but not due to trachoma. Paraguay also implemented an STH deworming campaign targeting school-age children, using schools for scaling up deworming activities, as well as strengthening health campaigns implementing prevention and educations to promote control actions to reduce STH infections.
- **Honduras** continues implementing integrated operational plans of actions in priority departments.
- **Honduras** and **Belize** reinforced their capacities to implement integrated actions for NID including integration of deworming for STH and vaccination for children under 15 years old during the regional initiative Vaccination Week in the Americas. A Rapid Coverage Monitoring (RCM) tool for monitoring and systematic analysis of deworming and immunization coverage was utilized.
- **Belize** organized a workshop to enhance the knowledge and capacities of 18 Public Health Nurses, regarding updates on integrated public health interventions to increase deworming coverage and improve the health status of children. The Maternal and Child Health Program within the Ministry of Health also conducted a national Public Health Nurses Meeting in collaboration with PAHO to discuss public health interventions to improve maternal health and reduce child mortality.

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

- **Lymphatic filariasis elimination in Guyana:** The country has a high level of commitment, the human resources and the capacity to successfully undertake all the activities of the LF elimination program, but still requires financial and technical support (training). Sustainability of the program is key and must be ensured until the validation of elimination of LF as a public health problem is achieved.
- **Elimination of trachoma as a public health problem:**
 - **Colombia** continues experiencing challenges to carrying out MDA in all the known trachoma focus due to financial constraints at the subnational level.
 - **Peru** delayed the implementation of the MDA in its only known trachoma focus due to internal administrative processes to approve the guidelines to use azithromycin for MDA. Peru also needs support to accelerate mapping efforts to establish the distribution and magnitude of trachoma in the country.
 - **Guatemala** continues experiencing financial challenges that prevent them from accelerating efforts to complete the studies needed to compile the necessary information to support a future elimination process.
 - At the regional level, there is a need to accelerate the expansion of active searches for trachoma in countries without recent history of the disease, but where there are communities living in rural and poor conditions and bordering countries where trachoma is endemic.
- **STH control:**
 - Despite the implementation of MDA campaigns to control STH in school and pre-school age children, countries need to expand deworming coverage in other groups at risk of STH, such as pregnant women (after the first trimester), women of reproductive age and workers at risk (as recommended by WHO).
 - The implementation of RCM in **Honduras** has served to identify gaps in the MDA campaigns, and to take opportune corrective action to achieve the coverage goal.

- WASH into the STH control programs continues to be a challenge. More work needs to be done with the improvement of the water and sanitation systems in schools and in the houses in endemic areas.

Topic 4: Neonatal Health

An increase in the visibility and relevance of neonatal mortality, as perceived by decision makers, has been observed in recent years. Neonatal mortality represents the main component of infant and childhood mortality; more than half of the deaths registered in children under five years of age occur in the first 28 days of life, particularly around the time of birth. Likewise, fetal mortality, its measurement and characterization, has begun to be viewed as relevant, both in countries and at the regional and global level. The burden of mortality due to fetal and neonatal deaths is significantly high and linked to the same determinants and causes, with significant inequities seen both between countries as well as within them.

Despite the above observations, there continues to be significant weaknesses in the coverage and quality of data on neonatal, and particularly fetal deaths, in many countries. Many national information systems do not allow for the analysis of inequalities related to neonatal mortality, since often there are not adequate stratifiers for such measurements. Along with the availability and analysis of data, it is a priority to strengthen the implementation of evidence-based interventions that contribute to reducing the burden of neonatal morbidity and mortality, considering that the main causes are preventable to a significant degree.

Three **main achievements** stand out during the third year of the grant:

- Important strides have been made in strengthening national plans aimed at improving the health conditions of newborns, with special emphasis on reducing inequities. Two central axes have guided this work: the generation of evidence to improve the health conditions of newborns, together with strengthening of skills and tools in countries for decision-making regarding newborn care.
- An integrated analysis and planning approach with countries was successfully carried out and launched via regional workshops. The analysis was completed from a regional perspective, analyzing neonatal health inequalities and trends for their reduction through 2030. With this information as the basis, workshops were coordinated in countries where, upon presenting the methodology to key participants from different technical areas, national goals were estimated and discussed. National neonatal mortality trends were also analyzed and potential goals, considering reductions in inequities, were estimated for 2030. A proposal for the analysis and audit of neonatal and fetal deaths was also presented and discussed, and roadmaps were established to update plans and goals with a focus on reducing inequalities in perinatal mortality. Increased concern and commitment of countries to advance in the measurement of inequalities in fetal mortality is an achievement that can be linked to the above work.
- A second achievement during year three was the completion of a draft of the Clinical Practice Guideline, an evidence-based publication outlining comprehensive and quality care of at-risk newborns. The editorial processes needed to complete this publication remains pending, but the plan is to launch the guide within the framework of the commemoration of World Prematurity Day.
- Finally, the first repository on birth defects surveillance has been formed, consolidating data generated from national registries. From this repository, countries that are registered will be able to assess the burden of morbidity due to congenital defects, assess their trends and plan and evaluate the impact of specific interventions. Currently, the repository is going through a data validation process in order to proceed to the next online publication.

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

- Analysis of estimation of trends, inequalities and reduction scenarios to the year 2030, based on 2017 data, at the regional level and later by countries.
- Workshops to estimate neonatal and fetal deaths and trends, with a focus on reducing inequalities. Throughout the year, workshops were held in Antigua, Colombia, Paraguay, and Dominican Republic (in other countries these workshops were replicated with other sources of financing).
- An online repository of resources in neonatal health was designed and developed. The repository summarizes and presents relevant information on plans, interventions and tools for the care of newborns, as well as data on mortality and consolidated data of surveillance systems for congenital defects. The intended audience of the repository are decision makers at different levels
- The preparation of the Clinical Practice Guideline for monitoring newborns in critical conditions. This publication involved the creation of a technical team, design review and systematization of the evidence, development of the guide, review by team of experts and external reviewers and preparation of the final document (short and long versions)
- Coordination of a technical meeting in Barbados, for English-speaking Caribbean countries on “Improving Perinatal Care in Barbados & the Eastern Caribbean”, aimed at strengthening the capacities of countries and exchanging experiences for improving quality of care for newborns.
- Technical cooperation for implementing evidence-based interventions
- In relation to the promotion and surveillance of congenital defects, the publication “Present and future of Birth Defects Surveillance in the Americas” was completed; the development of the platform consolidating country data and promoting the implementation of surveillance in countries.
- Co-Coordination of the Annual Meeting of the Neonatal Alliance for the Latin America and the Caribbean in 2018 and coordination of the Neonatal Alliance workshop and priority interventions in neonatal health within the framework of the Meeting of the Latin American Association of Pediatrics (ALAPE).

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

- One of the most relevant lessons learned has been the interest and need expressed by countries in relation to the measurement of fetal mortality. Many of the countries recognize their needs and at the same time the limited information available. Starting the analysis process has allowed us to identify a real need in the countries, as well as a relevant area of technical cooperation for PAHO that will have a large health impact.
- Additionally, there is a need to support countries in terms of the comprehensive assessment of newborn care practices, in addition to the development of standards and guidelines on this topic. Approaches such as regionalization and the comprehensive follow-up of newborns that is not disease-centered, are elements that countries value and which PAHO hopes to delve deeper into in the coming years.
- Likewise, an ongoing challenge is to continue to address neonatal conditions that have an unfavorable impact on the survival, growth, development and human capital of newborns, especially those born prematurely, such as blindness due to retinopathy and developmental delays.
- From the work carried out, it has been possible to identify that in many countries there are still limitations present in the availability of stratification variables in the existing databases that allow for the measurement and analysis of inequalities.
- A final lesson learned is that integrating efforts with partners is essential to maximize impact in the area of neonatal health.

Topic 5: Maternal Health

Maternal mortality is still a problem in the region. After a marked decrease in the regional maternal mortality rate for the period covered under the Millennium Development Goals, there has been a considerable deceleration in the reduction of maternal deaths. The cause of this deceleration is two-fold: the decreasing trend in maternal deaths has stagnated in several countries, while maternal mortality rates have increased in a second group of countries.

Among countries that are reporting increasing maternal deaths, four of them (Brazil, Dominican Republic, United States of America and Venezuela) have a great impact on regional maternal mortality figures. For the region, the cases of Brazil and USA are very relevant; even when these countries have maternal mortality rates below the regional average, due to their population sizes, in absolute numbers they contribute a high number of maternal deaths.

In addition, the response to maternal mortality exceeds what can be done from the health sector, since maternal mortality is a multi-causal problem with serious socio-economic-cultural determinants that require actions from other areas of the society. However, from the health sector and through this project, work has focused on improving maternal health surveillance, both for maternal mortality, as well as for severe maternal morbidity. Efforts have also been made to improve the quality of care provided to pregnant women through capacity building in evidence-based techniques for health professionals.

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

- The Technical Working Group (TWG) on Maternal Near Miss has established the standardized regional criteria to collect information at country level produced by the national surveillance information systems. These regional criteria need to be validated by ministries of health of PAHO Member States and will be considered in the elaboration of the next set of guidelines for the national surveillance of maternal near miss.
- One recent achievement was the internal agreement between PAHO's Latin American Center for Perinatology (CLAP) and the Department of Evidence and Intelligence for Action in Health (EIH) to include maternal near miss data on the Health Information Platform for the Americas (PLISA). This agreement included the design of a standardized form to collect information on maternal near miss and the logistic aspects for data collection and the subsequent uploading of data into PLISA (who and how).
- The second edition of Managing Complications in Pregnancy and Childbirth (MCPC) and the WHO recommendations: intrapartum care for a positive childbirth experience are now available in Spanish. These guidelines have been disseminated among 18 directors of Maternal and Child Programs of Ministries of Health (MoH) across the Region and five countries (BRA, BRB, SKT, JAM and HND) have already incorporated into their new national guidelines for maternal care, the concepts promoted in these documents.
- Within the framework of the educational interventions promoted in the CLAP Network, preliminary studies have shown a statistically significant improvement in the use of practices recommended by the available evidence, including the screening of pregnant women for HIV and syphilis, prophylactic use of antibiotics in cesarean section and others.

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

Activities related to maternal mortality and morbidity surveillance^[1]:

- A Maternal and Perinatal Death Surveillance and Response (MPDSR) web-based self-tutorial course in English was finished and validated. This course will be open access and launched on November 1st, 2019 through PAHO's Virtual Campus for Public Health.
- The TWG on Maternal Near Miss was constituted in December 2018. In July 2019, a face-to-face meeting was held in Panama City to discuss the variables that should be included in the countries' surveillance systems, in order to develop a regional standard. Experts from WHO, Canada, Brazil, Argentina, United States and representatives from ministries of health that are monitoring maternal near miss at a national level (Cuba, Colombia, Mexico and Trinidad and Tobago) participated. A standardized form for the regional surveillance of maternal Near Miss was agreed upon and space was created in PAHO's PLISA Platform to accommodate this new data and make maternal near miss information available to Member States. Data collection through PLISA will begin in March 2020.
- A protocol for the surveillance of maternal near miss was incorporated into health facilities of the CLAP Network; currently hospitals from five countries are collecting information (Colombia, Dominican Republic, Honduras, Nicaragua and Guatemala). There was an initial delay in the data collection, but results are expected by December 2019.

Activities related to improving quality of care on maternal health:

- Support from USAID has allowed for the translation of the documents "Managing Complications in Pregnancy and Childbirth (MCPC)" and the "WHO recommendations: intrapartum care for a positive childbirth experience" into Spanish for distribution across Latin America. In July 2019 a meeting was held of the Regional Task Force on Maternal Mortality Reduction (Spanish acronym of GTR) in Panama City, with the participation of 18 countries. During this meeting, the WHO recommendations were presented, discussed and distributed.
- From April to August 2019, an educational intervention "Evidence-based practices for maternal and perinatal health" was carried out in the hospitals of the CLAP Network in six countries (Bolivia, Colombia, Dominican Republic, Honduras, Nicaragua and Guatemala). Through this intervention, the use of evidence-based practices was promoted in bimonthly virtual webinars.

Strengthening of Midwifery Practices:

- A competency-based education (CBE) workshop on evaluation was held last September in Port of Spain-Trinidad and Tobago, with the participation of members of the Caribbean Regional Midwives Association (CRMA) from six English-speaking Caribbean countries (BRB, GUY, JAM, SKT, STL, BAH and T&T) and an external observer (Jhpiego).
- Both Peru and Argentina received support in the area of midwifery regulation. In Peru, a web-based self-tutorial course on regulation issues was developed for the College of Obstetricians of Peru. In addition, Argentina was supported through advocacy efforts with members of the Senate Chambers to approve midwifery regulations.

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

- The educational intervention "Evidence-based practices for maternal and perinatal health" disseminated through Webinars among the members of the CLAP Network, proved to be a useful and low-cost tool that

^[1] Links to all referenced materials, courses and meetings can be found in section 5 of this report "Products Developed during Current Project Period" under the Maternal Health section.

was well received by the participating health facilities teams. In addition, monitoring these practices before and after the intervention showed an increased use.

- The CLAP network hospitals have proven to be an excellent staging ground for improving the quality of maternal health care. During this reporting period, PAHO has continuously monitored the quality of clinical records and has given feedback on key information produced in these hospitals. The challenge will now be to ensure that in the future without the support of USAID/PAHO, these hospitals are able to sustain the improvements made.
- Despite of the efforts made to support regulatory processes of the midwifery profession in the region, results have not been as expected. During USAID YR1 and YR2, the International Confederation of Midwives (ICM) Pillar on regulation was disseminated. This dissemination was made among key professionals (midwifery colleges' presidents, prestigious midwifery teachers and leading opinion midwives). However, the follow-up work that was planned has not been able to be completed. This fact has led PAHO to conclude that midwifery associations are still in a period of transition and they are not prepared to include regulation as a main issue on their agendas. Promotion of midwifery regulations remains a challenge that will need to be confronted again in the future.

Topic 6: Inequity Across the Life Course

Globally, the region of the Americas has the largest health inequities within and among countries. In order to address the persistent health inequities in the Americas, an inter-agency movement *Every Women, Every Child-Latin America and the Caribbean (EWEC-LAC)* was formed with the shared leadership of eight international organizations. Specifically, the movement hopes 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. It plans on doing this by:

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

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

- Approval of a Plan of Action for Women's, Children's and Adolescents' Health by all LAC Member States. At the end of 2018, during PAHO's Directing Council, Member States unanimously approved a Plan of Action for improving women's, children's and adolescents' health, *focusing on the most vulnerable populations*³. This resolution was the culmination of a year-long consultation process, guided by an ambitious strategic plan (SP) that the members part of the regional inter-agency movement Every Woman Every Child for Latin America and the Caribbean (EWEC-LAC) had developed and implemented a year earlier. The Plan of Action is different from previous Plans in

³ PAHO's 56th Directing Council. 70th Session of the Regional Committee of WHO for the Americas. Plan of Action for Women's, Children's, and Adolescents' Health 2018-2020. Available at: https://www.paho.org/hq/index.php?option=com_docman&view=download&category_slug=paho-who-mandates-strategies-6280&alias=47373-integrated-poa-wcah&Itemid=270&lang=en

the sense that it sets out to pursue equity as a specific strategy rather than just assuming it as a mere byproduct.

- EWEC-LAC Guide for Implementing the Global Strategy for Women's, Children's and Adolescents' Health in Latin America and the Caribbean. At the end of 2018, the EWEC-LAC launched the *Guide for Implementing the Global Strategy for Women's, Children's and Adolescents' Health in Latin America and the Caribbean*. The first of its kind, this guide recounts the process and presents the outcomes of a series of meetings that were held during 2017 in the region to interpret the Global Strategy and to develop recommendations for equity-based, multisectoral approaches that can be used to implement the Global Strategy and monitor progress at the national and local levels in LAC.
- The Establishment of a Youth Advisory Group. EWEC-LAC has contributed towards the establishment of a Youth Advisory Group (YAG) which will support agencies part of the EWEC-LAC movement to: mainstream meaningful and sustainable dialogue and partnership with young people in the Americas on their health and well-being; to facilitate and advocate for meaningful and sustainable youth participation in health in LAC countries; to establish a group of youth health influencers who strategically use social media platforms to improve the health and well-being of their peers; and to support youth-led health initiatives at the regional and country level.
- In June 2019, the movement supported an intersectoral and multidisciplinary team to review their *National Adolescent Pregnancy Prevention Program* using an equity, human rights based and gender sensitive approach. This review included the collection and analysis of both qualitative and quantitative data to identify the groups of adolescents that are being left behind by the program, examine the barriers keeping them behind and explore the structural determinants causing identified barriers. This included implementation of local consultations with indigenous and afro adolescents and youth to better understand their experience in terms of barriers and facilitating factors to health. This review also served to better understand if, and to what extent, different sectors and stakeholders (including adolescents themselves) had been engaged in the development, implementation and evaluation of the program thus far, and how that could improve. Using the findings and conclusions of this review, the National Program was officially revised, and an accompanying inter-sectorial *Plan of Action* was drafted. The new Plan not only prioritizes those groups of adolescents previously left behind but it also proposes specific strategies for reaching them. Currently, the team is in the process of finalizing the Plan, with an accompanying monitoring and evaluation framework that uses equity-based indicators and targets.

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

- **A package of selected tools, instruments and methods** to identify or address inequities were *disseminated* widely (ARG, BRB, COL, ECU, GTM, JAM, NIC, PER, PRY, SUR, TTO, URY, VEN) through virtual and in-person meetings and workshops.
- **Technical support** in the implementation and scaling up of selected tools, instruments and methods to identify and/or reach populations living in vulnerable conditions was provided to countries including, but not limited to, Dominican Republic, Honduras, Guatemala, Argentina, Uruguay, and Peru.
- **Mobilization of financial resources** was conducted during the end of 2018 and beginning of 2019; as a result, a total of USD 120,000 was raised by the global Partnership for Maternal, Newborn and Child Health (PMNCH). Dialogues with other donors, including Laerdal Foundation, JICA, the Gates Foundation and MFA Norway have also been initiated
- **Regional and country policy dialogue** facilitated amongst key stakeholders on addressing women's, children's and adolescent's health inequities were held during key events such as the PMNCH annual board meeting, the Global Partners Forum, the PAHO Directing Council, and during UNGA side-events.

- **Expansion of the EWEC-LAC movement** to include three of the regional technical groups working specifically on equity (Pelotas) maternal health (GTR) and neonatal health (the Neonatal Health Alliance).
- **Annual coordination meetings** between the EWEC-LAC working group and Executive Management Committee members were held, reviewing progress made, discussing challenges encountered and determining the strategy for the upcoming year.

In addition, the following **lessons learned and challenges** to implementation were faced during FY2019:

- The working group responsible for activities and deliverables dedicated towards addressing inequities, also known as the Working Group on Policies, Strategies, Interventions (PSIWG) has had a slow start, which has delayed many of the planned products for the time period October 2018 to September 2019. However, the work is finally wrapping up, and will culminate in a concrete regional report to accelerate progress towards reducing inequities in women's, children's and adolescents' health.

Topic 7: Health Information Systems

Governments require strong information systems for health (IS4H) that provide the data and evidence for formulating sound policies and decisions. The Americas has achieved significant improvements; mortality underreporting has decreased from 5.8% in 2008 to 5.1% in 2016, and the coverage and quality of mortality and live births data have improved. Nevertheless, challenges persist to address fragmented information systems, limited analytical capacities, data quality challenges (while protecting privacy), and other issues hindering access to quality and accessible data. PAHO's Member States recognize this urgent area of work, particularly given the need to produce disaggregated, subnational-level data to measure the Sustainable Development Goals (SDGs) to ensure that no one is left behind. PAHO seeks to address these challenges as outlined in the Sustainable Health Agenda for the Americas 2018-2030 (Goal 6), WHO's upcoming digital health strategy, and PAHO's plans of action for strengthening vital statistics (2017-2022, document CSP29/9) and IS4H (2019-2023, document CD57/9). USAID support allows PAHO to conduct assessments and produce guidelines, model policies, and procedures. The Latin American and Caribbean Network for Strengthening Health Information Systems (RELAC SIS) draws from regional expertise and excellence to facilitate the dissemination of practices and success stories and provides health personnel with access to free-of-charge trainings and forums.

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

- PAHO's Member States have expressed a commitment to strengthening their information systems for health (IS4H) with the passing of a new plan of action during the 2019 Directing Council⁴. This new mandate will set the tone for work through 2023 as the Region takes the steps necessary to ensure the availability of quality data for health action. This plan of action is the result of USAID-supported technical collaboration and missions across the Americas, including two conducted in Guyana and Suriname in 2019. The evaluation reports are guiding countries to implement the needed measures to improve their existing systems by addressing identified gaps and weaknesses. The Interamerican Development Bank (IDB) has recognized the value of PAHO's IS4H maturity assessment tool in guiding interventions for strengthening information system. As a result, these IS4H assessments are now prerequisites for health investments in beneficiary countries. PAHO is positive that this renewed commitment from Member States and the IDB will contribute to improved health data quality for the Americas.

⁴ PAHO's 57th Directing Council. 71st Session of the Regional Committee of WHO for the Americas. Plan of Action for Strengthening Information Systems for Health 2019-2023. Available at: https://www.paho.org/hq/index.php?option=com_docman&view=download&alias=49675-cd57-9-e-poa-information-systems&category_slug=cd57-en&Itemid=270&lang=en

- The RELACSIS network continues to facilitate PAHO's fostering of South-South and triangular technical cooperation. This year it has expanded its membership to include countries and territories in the English-speaking Caribbean, as well as Haiti and Suriname. Argentina and Mexico remain leaders in the Region in terms of quality and coverage of vital statistics, with Mexico's CEMECE (a PAHO/WHO Collaborating Center) as a key partner in sharing best practices for the intentional search and reclassification of maternal deaths (BIRMM, by its Spanish acronym) methodology. USAID support has allowed PAHO to train 43 International Classification of Diseases (ICD)-coders and health workers from sixteen countries in improved ICD coding and in the BIRMM methodology. Several countries in Latin America have adopted the BIRMM methodology over the past years, with missions conducted to Peru and Paraguay, resulting in more robust data on maternal mortality. Evaluation missions are scheduled for later this year to Honduras, Paraguay, and Peru to provide both countries with additional training as they seek to ensure every maternal death is captured.

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

- This fiscal year, PAHO continued to engage countries in the Americas to commit to investing in IS4H to track progress towards ensuring no one is left behind. USAID support, along with investments from the Government of Canada, enabled PAHO to expand the IS4H toolkit, which includes the IS4H assessment tool and other methodologies, tools, factsheets, and knowledge capsules. In-person and virtual assessments using the IS4H assessment tool were conducted on countries' information systems, yielding technical recommendations and roadmaps for targeted countries to invest resources in the coming years. In collaboration with other multilateral agencies, PAHO will expand the IS4H assessment tool to include modules on vital statistics and health analytics capacities. PAHO engagement with the IDB has further cemented IS4H as a critical component for considering loans to countries' health sectors, as recently demonstrated in IDB loans made to Jamaica and Suriname. Moving forward, this groundwork is expected to contribute to measurable improvements in the quality of health data in the Americas.
- The RELACSIS Network has continued to facilitate capacity building and the promotion of triangular cooperation. PAHO has provided countries with capacity building in ICD-10 coding, the methodology for the intentional search and reclassification of maternal deaths (BIRMM), death certificate completion, and applying personal identification numbers to the health sector. Most RELACSIS content is now available in English, expanding access to users from the Caribbean. PAHO is conducting a review of death certificates used in countries across the Region to identify areas for improvement that will result in improved mortality data. A diagnostic of vital statistics systems in the Region is underway to guide work towards the targets set in PAHO's Plan of Action for Strengthening Vital Statistics. PAHO provided capacity building to the Dominican Republic to strengthen vital statistics analytics and maternal and child mortality surveillance with a focus on subnational data.

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

- The experience with IS4H will serve as a positive learning experience for future health initiatives. PAHO successfully engaged Member States subregion by subregion over a four-year period to build region-wide consensus that IS4H is a priority for measuring progress towards health goals. This was complemented by the development of assessment tools and other materials which codified best practices and recommendations from PAHO and key Collaborating Centers. Partnering with the IDB has ensured that countries' health investments will be accompanied by concerted efforts to reinforce information systems.
- The RELACSIS network was originally conceived with a strong focus on vital statistics. PAHO has leveraged the relationships forged through this Network to expand the areas of technical cooperation provided to

include also IS4H topics. This will help minimize duplication of efforts and ensure that stakeholders involved in various aspects of information systems are aligned in their approach and priorities. Moreover, this is anticipated to be the first step towards PAHO creating a network of networks which contribute to IS4H areas of work.

Topic 8: Health Systems Strengthening

Health Financing and Fiscal Space

Over YR3, PAHO has provided support and high-level advocacy for the implementation of the recommendations coming out of the health financing meeting conducted Barbados in August 2018 (YR2), as well as working with selected countries on the implementation of payment mechanisms as per recommendations of the conceptual framework, also developed during Y2 of the USAID grant.

The Organization has also worked with countries to move forward the implementation of PAHO's monitoring framework for universal health (UH). The objective of this work is to assist countries in measuring their achievements and gaps towards the Regional Strategy for Universal Access to Health and Universal Health Coverage (UHC). Based on country context and needs, as well as the availability of information, PAHO and implementing countries can prioritize what sections and/or indicators of the framework are included in the assessment.

With the approval of the Astana Declaration on Primary Health Care in YR3, PAHO's Member States reinvigorated their impetus for addressing access barriers to health care and increasing public expenditure in the first level of care; both key components of the Regional Strategy for Universal Health. This highlighted the need for regional monitoring of access barriers to health services, including, geographical, financial, cultural, institutional and organizational, with a focus on equity. Likewise, this underscored the need for regional monitoring of public expenditure in the first level of care.

To respond to these needs, PAHO and Member States prioritized regional monitoring of the indicators mentioned above. An extensive mapping exercise of household surveys was conducted across all Member States to determine the feasibility of regional monitoring of access barriers, health spending and equity. This resulted in baseline assessments of access barriers and methodological recommendations. In addition, capacity building to produce health financial indicators was conducted and analyses of available data was also supported.

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

- PAHO supported fiscal space studies for Suriname and Belize and supported discussions on the implementation of National Health Insurance (NHI) in selected countries and territories.
- A study on Public Private Partnership initiatives (PPP) was conducted, as requested by some Caribbean countries. This study will be used to promote a broad discussion on this topic, which is a modality being looked at in several countries (i.e. Jamaica).
- PAHO supported a project to develop financing systems for integrated health service delivery networks in Peru. In the Dominican Republic, PAHO recommended the basis of a financing system for health networks with priority in the first level of care, through a concept note. Relatedly, during the YR3 period, PAHO supported a study on rates of health care procedures from the perspective of discussing a new system of payments to providers. This issue is pending further development.

- In addition, PAHO conducted an analysis of the status of payment systems in some countries to promote a broad discussion on this topic in the region
- PAHO supported the implementation of PAHO's monitoring framework for universal health in Peru, Barbados, Bahamas and the Dominican Republic.
- PAHO conducted mapping of household surveys across all Member States to assess the feasibility of conducting regional monitoring of access barriers to health services.
- Baseline data on access barriers to health care were produced for 3 of 4 targeted countries with this grant in Y3: Barbados, Dominican Republic, and Peru. Baseline data was also produced for other USAID countries: Costa Rica, Jamaica and Uruguay.
- PAHO implemented capacity building activities on the production of health accounts using SHA2011 standard methodology to measure and conduct global, regional and country level monitoring of health expenditure. An online course offered through PAHO's Virtual Campus of Public Health included Dominican Republic and Peru, as well as other USAID countries for a total of 19 countries.
- Validation of annual health expenditure data published in WHO's Global Health Expenditure Database (GHED) including quality check reports on consistency of the data, time series trends and comparison with last year's publication was developed for Y3 targeted countries: Bahamas, Barbados, Dominican Republic and Peru, among other USAID eligible countries.
- Analyses of financial protection indicators were conducted for Barbados, Bahamas, Guyana, Jamaica, Suriname and Trinidad and Tobago as part of the global monitoring of SDG indicators. In addition, training for the measurement and analysis of financial protection indicators, such as catastrophic spending and impoverishing spending, was organized.

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

- In the area of financing, during this period PAHO implemented missions, studies and meetings. Two studies of fiscal space were carried out in Caribbean countries, several missions in countries for support and advocacy in national debates were also implemented.
- PAHO conducted several missions and supported national debates in several countries including Peru and the Dominican Republic. In Peru, meetings were held with experts in network financing. In the latter case, studies on budget for results and monitoring of the financing structure were supported, both in collaboration with WHO and therefore, with complementary financing
- PAHO implemented the monitoring framework for universal health in Guyana, Peru and Belize. In the case of Peru, a Country Health System profile was produced, and it is now with national authorities for final approval. In Guyana, support for the application of the framework included the preparation of a work plan, templates for compiling quantitative indicators and qualitative data collection tools. This concluded with a workshop attended by national health authorities and academic institutions to validate and discuss the results. In Belize, the monitoring framework is being applied in support of the Evaluation of the Health Sector Reform, currently in process.
- Mapping of household surveys for assessing access barriers and equity found that it is feasible to conduct regional monitoring in 26 Member States. Analysis of access barriers and equity are being conducted with first round of results submitted for publication in The Pan American Journal of Public Health (PAJPH). The publication has been accepted, pending modification requested by reviewers. Regional report with results from mapping exercise and analysis is currently under preparation.
- Production, collection and monitoring of quality health expenditure data in 35 countries of the region, provided the inputs to build the key health financing indicators for tracking universal health and the SDG 3 (public health expenditure to GDP; out of pocket to total health expenditure; and financial protection) Health accounts data feed into the global monitoring reports as those presented to the UNGA in September 2019. PAHO's effort on strengthening country capacities on producing continuous quality

health accounts aim to ensure country health expenditure statistics are aligned with the global accounting standard methodology (System of Health Accounts 2011) to describe health financing systems and to help health expenditure time series correctly reflect country health financing systems and the equity and efficiency impact of policy changes and reforms towards universal health.

- Regional data and analysis on the financial protection indicators were included in the global monitoring report presented by WHO at UNGA. In financial protection it was necessary to support the hiring of specialized consultants who, led by PAHO advisors, built the necessary indicators to deliver to UNGA 2019 monitoring process of indicator 3.8.2, this was a joint activity with WHO and the World Bank and had additional financing from other PAHO sources.

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

- The application of the tools to understand the financing of countries has helped to guide their progress in increasing resources and in the forms of pooling and payment systems. The information available to measure key indicators, including those of financial protection and health accounts, are not scarce, although countries still require greater capacity and standardization so that information is useful to support policy decision making within the reform processes in the countries and territories themselves.
- While the application of the monitoring framework has been useful in the identification of areas suitable for policy intervention in the countries, political context coupled with weak stewardship role of national health authorities hinders the formulation, let alone implementation, of policy options for making progress towards universal health.
- Availability of data and the state of information systems, combined with limited capacity for monitoring health policies and reform processes in countries is an ongoing challenge, hence, the technical cooperation approach is to build self-sustaining capacities, so that countries will be able to carry out this function on their own.

Improving Information for Selection and Availability of Essential Medicines within Health Services

One of the main factors affecting programming, acquisition and distribution of medicines is the weakness in information systems for supply management. Health Authorities in both Paraguay and Guyana requested technical support to strengthen their national information systems. The focus areas are health services in the Paraguayan Chaco and rural areas of Guyana. During the first year of the project, a baseline for selected tracer medicines used in maternal health services was established.

The assessment also reviewed relevant supply chain processes (warehousing, distribution, and stock management) and the relation with the Regional and National Supply Chain Process (order requisition, stock reporting etc.). The assessment led to the development of a set of recommendations specific for each country to be implemented in YR2. Public Health facilities were selected in each country to serve as a model to train personnel from other regions and health facilities outside of the scope of the project, in order to start developing a long-term sustainable solution. YR3 focused on implementation of trainings in the public health facilities identified, as well as strengthening governance.

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

- **Paraguay:**
 - The list of essential medicines was updated, with the participation of the Ministry of Public Health, national programs, academia and the scientific community, and with the support of PAHO / WHO and its Collaborating Center.

- A model for an integrated management system of supply of medicines and medical devices was drafted, initially for the network of services of the Ministry of Public Health of Paraguay. This will be a normative guide in the implementation of good practices.
- The SICIAP Information System was strengthened, implementing strategies to capture unsatisfied demand from “Parques Sanitarios” and all the warehouses and pharmaceutical services of the public network. The HIV/ AIDS program captured 96% of the dispensations made in health facilities, through the SICIAP System, improving the quality of the data, before the monthly distribution. The Barrio Obrero General Hospital implements the use of SICIAP, eliminating other manual or Excel methods.
- Hospital General Barrio Obrero implemented a model of supply system and good practices of pharmaceutical services and developed standard operation procedures for the pharmaceutical service.
- **Guyana:**
 - 74 pharmacy personnel (pharmacist, pharmacist assistants, med ex and community health workers) received logistic information management system (LMIS) training in Regions 2, 7 and 8. After the training a pharmacy lead was identified to conduct an internal regional supervisory visit to vet the CRIV with the finality to monitor stock management and reduce stock out.
 - Thirteen pharmacy personnel from the different program areas of the Ministry of Public Health were trained in quantification, to facilitate the calculation of pharmaceutical needs using one of three primary quantification methods, past consumption, morbidity (including scaling-up patterns), and proxy consumption.
 - LMIS supervisory visits were conducted in Region 1 (Matakai, Mabaruma and Port Kaituma), twenty-two sites (Regional Hospital and District Hospitals, Health Centers and Health Post) were visited utilizing the LMIS checklist tool for supervision. Each supervisory team collected aggregated data from the LMIS Registers to budget for 2020 forecasting of medicines, conducted on the job LMIS training, and monitored and evaluated to encourage accountability of medicines and medical supplies.
 - Assessment of the availability of tracer medicines used in Maternal Child Health was done at 20 sites (Regional, District Hospitals, Health Centers and Health Post). The assessment led to the development of a set of recommendations specific to the availability of Maternal Tracer Medicines and will be shared with the regions for specific actions to be taken by the Regional Health Officers to address the gaps within the regions.

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

- **Paraguay:**
 - Development of an integrated management system of supply of medicines and medical devices: Meeting led by MOH with 73 MOH personnel, the National University and PAHO/WHO. Defined roadmap, created work teams, reviewed other models, reviewed regulations, drafted proposed model.
 - Strengthening of the SICIAP information system: the DGGIES has carried out communication, training and accompaniment strategies, for an adequate use of the system and to improve data. In February, the Minister of Health issued a regulation that forced public establishments to properly use SICIAP.
 - HGBO implementation of good pharmaceutical practices:
 - i. Training in system processes, with the partition of 18 HGBO officials, 4 representatives of the DGGIES, 1 professor from the National University and PAHO.
 - ii. Application of the self-diagnostic tool with 17% compliance with the essential conditions

- iii. Application of tool for availability of tracer products in mother and child: result 92% compliance availability in deposit and 62% in distribution pharmacies.
 - iv. Conformation of the Pharmacotherapy Committee
 - v. Collected all medicines and devices donated to different services to be reviewed and entered into the information system.
 - vi. Created an emergency satellite pharmacy, impacting favorably on the outpatient dispensing service, reducing the waiting time in the main pharmacy by about 30 minutes.
 - vii. Implementing the electronic records system for outpatient services. The electronic records system has an interface with SICAP.
- **Guyana:**
 - LMIS supervisory visits: twenty-two sites were visited utilizing the LMIS checklist tool. Pharmacy personnel were in a better position to provide an update on their consumption and provide quality data to MMU for forecasting of medicines. This resulted in reduction of stock out, expired and overstocking of medicines.
 - The assessment conducted on the availability of tracer medicines was completed in Regions 1, 2, 7 and 8. Baseline availability results, expressed as average for all maternal tracer medicines, is 77% for the four Regions. This report will be shared with each region to address the challenges identified.
 - There is a strengthened relationship of the Pharmacy Logistics Officers assigned to these Regions and along with the Regional Pharmacy Lead, to monitor stock status, collect data for quantification and reduce stockout in the Regions
 - The Ministry of Public Health (MoPH) hired pharmacist assistants for Regions 1,7 and 9 and is in the process of hiring more pharmacists and pharmacists' assistants to monitor LMIS activity in each Region.

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

- **Paraguay:**
 - The implementation of new processes can lead to resistance to changes within the organization, making it necessary to strengthen training and follow up.
 - Health personnel, hired for part-time (3 or 4 working hours), affect the ability to manage and execute actions defined for continuous improvement.
 - The implementation of the electronic prescription is a challenge, with respect to the provision of equipment in all hospital services. It is an activity with many benefits and requires a significant investment.
 - The adequate use (quality and timeliness) of the SICIAP System has been a challenge, throughout the network, presenting multiple justifications for compliance; greater accompaniment and follow-up efforts are required.
 - It has been a success having work teams from different backgrounds other than academia.
 - The commitment of the high authorities from the Minister of Health and the Strategic Directorate of Medicines and Supplies has been successfully attained.
- **Guyana:**
 - Coordination between the Ministry of Communities (MOC) and Mop is needed in the management of the supply chain as the MOC holds the budgetary allocation to finance the supply of public health commodities in the regions.

- Human resource limitations at all levels of the health system negatively impact logistics management. Shortage of pharmacist and pharmacy assistants in the regions placed burden on prescribers who also must dispense, maintain the records and work at more than one health facility.
- Coordination between the different program directors is needed when procuring drugs and medical supplies, as this will avoid overstocking, expired and stock out of medicines.
- Lack of reporting from Materials Management Unit (MMU) to the different program directors on the availability of drugs and medical supplies in the warehouse, increases the risk of stockouts.
- Lack of reporting from the procurement department to program directors on the shipment of medical supplies and medicines was also a challenge. Access to a tracking system by the program directors on shipments will address this issue. Regions do not receive the Combined Requisition and Issue Voucher (CRIV) schedule on a timely basis, which resulted in delays when filling out the CRIV from MMU.
- There is the need to implement electronic LMIS at the hospitals since they are in receipt of the bulk of the health commodities and this should improve efficiency and accountability of medicines.

Develop Competencies for Health Professionals and Community Health Workers

As recognized by the 2030 Agenda for Sustainable Development, WHO's Plan of Action for the Global Strategy on Human Resources for Health: Workforce 2030, PAHO's Plan of Action 2018-2023 for the Strategy on Human Resources for Universal Access to Health and Universal Health Coverage and the Tunis Declaration on Social Accountability, education programs for health personnel should be relevant to the local context and based on needs identified, in collaboration with key stakeholders and communities. In addition, strong evidence is emerging that health workforce education based on social mission/social accountability (SA) principles and interprofessional education can strengthen health systems and positively influence equity in terms of access, availability, distribution, quality and performance of health workers.

This component of the project is aimed to improving health equity in the region of the Americas by expanding the knowledge, skills and attitudes required for socially accountable practice, research and education of future health workers. The main focus is to help transforming health workforce education by strengthening several dimensions of socially accountable education for health: a) alignment of curricula with social needs; b) targeted student selection; c) training taking place in the primary care context in which graduates are expected to serve; d) regional postgraduate training and career pathways in underserved regions; e) interprofessional education and practice; and f) meaningful partnerships with communities and other stakeholders.

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

- Contributing and supporting the scaling up of social accountability (SA) in health workforce education at national, regional and global levels.
- Social accountability is creating a new mandate for medical schools and other academic health sciences institutions beyond their normal function of educating doctors and other health personnel. Nevertheless, the application of the concept of SA in day-to-day work of academic institutions does not yet match the steps taken towards institutionalizing the idea. Furthermore, there remains a lack of clarity around the conceptual issues of SA. This new role for health education institutions and the lack of clarity around it necessitate training and tools on SA. For these reasons, during 2018-2019 funding from USAID partly served to support:
 - Successful piloting at national, regional and international levels of the Indicators for Social Responsibility (ISAT) instrument, together with dissemination of white papers recommendations developed by members of the Consortium for the advancement of SA on health workforce

education in the region of the Americas. Workshops and presentations took place in Australia, the United States and Canada, Panama, Trinidad and Tobago, Brazil, Colombia, Peru, Chile and Argentina. More than 200 medical schools have participated in-situ in these piloting and dissemination events to date.

- Sharing of experiences and best practices on social mission development and evaluation by representatives of the Consortium from the United States and Canada, Jamaica, Brazil and Argentina, who participated at relevant regional and global events on transformative education for health professionals. These events took place in Australia, the United States, Colombia and Peru.
- Piloting and sharing of tools developed under this project were prioritized during this period for tactical and practical reasons. Funds initially allocated to conduct the annual meeting of the Consortium were used to partially support the participation of Consortium's members from targeted countries and PAHO staff at international events to run ISAT implementation workshops and white papers dissemination activities. Mentoring, technical cooperation and faculty/students exchanges between institutions from different countries will be reactivated during 2020.
- Lobbying to promote the inclusion of standards and indicators on social accountability (SA) and interprofessional education (IPE) -as essential drivers for change - on future evaluation and accreditation models was initiated at the following countries: Argentina, Chile, Brazil, Colombia, Panama and Peru (as well as in all countries and territories of the English Caribbean through CAM-HP/Caribbean Accreditation Authority for Education in Medicine and other Health Professions)
- Production of courses, digital resources and educational materials on SA and IPE in different formats and languages (English, Spanish and Portuguese) has continued -although at slower pace than expected- and will not be fully available till next year.
- In order to promote sustainability and country self-reliance, it should be noted that -starting also in 2020- all tools and materials developed under this initiative will be made freely available on digital formats in Internet as public goods under Creative Commons licenses.

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

- As explained above, during this period most activities and deliverables were focused on facilitating participation of members from targeted countries of the Consortium in key international and regional events directed to the transformation of health professions education towards universal health and health equity. The main goal was to disseminate and share products and experiences developed under the current project.
- Activities included workshops, presentations and publications based on white papers and instruments developed with support of this grant on: a) the tracking of medical students; b) the professional development of community health workers; c) pipelines and student recruitment and selection; d) in-country implementation of the ISAT instrument and inter-professional education networks.
- These activities also received support from PAHO/WHO Collaborating Centers (CC) on medical education in the United States of America and Canada. Countries that benefited directly were Argentina, Brazil, Chile, Colombia, Peru, Jamaica, Barbados and Trinidad and Tobago. In addition, successful global exposure of the project and its products was achieved at three world events in Colombia, Peru and Australia.
- Lessons learned are already guiding the development of goals, plans and products in future phases of the project.

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

- Disseminating and piloting the implementation of the ISAT instrument and white papers recommendations at national, regional and global levels has been an extremely rewarding experience.

These tools have been very well received and most institutions have found them innovative, relevant and very useful to self-assess their own path towards social accountability (SA)

- Lessons learned and challenges encountered during the workshops and presentations are already guiding the improved methodologies to be used in future events. Enablers and barriers detected have also helped us to review the contents of courses and educational materials being developed (and that will be central products in YR 4)
 - Perceptions of SA are still unclear, and more work is needed to translate the concept into action. The online courses we are developing shall provide a flexible way to conduct training programs. To our knowledge, no structured work describing formal training in social accountability has been published in Latin American and the Caribbean.
 - Academic prestige is a key barrier to implementing SA that is heavily influenced by research priorities and student selection. Identifying and supporting credible SA champions is vital to tackle staff and student perceptions in order to facilitate progress. Including practical community experience for students in the curriculum allows meaningful engagement with local partners.
 - Evaluation of progress should serve to focus action but should not be exhaustive. Each institution should develop its own indicators of progress as a uniform approach for all medical schools is unlikely to be suitable.
 - Perceived lack of clarity around performance indicators on SA and the absence of financial incentives to meet them will need to be addressed by accreditation systems incorporating specific standards and indicators.
 - Demonstrating the contribution that the institution can make to local health improvement and regional development through its economic footprint is also valuable.

3. Inter-programmatic Efforts

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

- As part of work in malaria, pharmacovigilance and adherence pilot interventions were developed with Colombia and Brazil in coordination with HSS department.
- Work to complete the LF surveys in Guyana provided an opportunity to update the epidemiological profile of neglected, water and food-borne diseases and to identify immunization gaps of vaccine preventable diseases to support public health decisions. In addition to LF, for this survey Guyana's Ministry of Health decided to include antigens of interest for the country to characterize the sero-epidemiological of malaria, strongyloidiasis, trachoma, yaws, and taeniasis / cysticercosis and vaccine-preventable diseases: measles, rubella, diphtheria, and tetanus. For this purpose, DBS samples were taken to be processed by Multiplex by the US Centers for Disease Control (CDC). The CDC also provided training for the sampling, processing and interpretation of the results of the FTS.
- The activities carried out around the estimation of goals, trends and inequalities in neonatal and fetal mortality (CLAP) were carried out in jointly with other PAHO technical teams, including staff from the Department of Evidence and Intelligence for Action in Health (EIH) and the Metrics area of EWEC-LAC. Both regional estimates and workshops were planned, developed and evaluated together. Coordination was also achieved with the technical team from PAHO's Department of Health Systems and Services (HSS) for the identification of needs and gaps in the improvement of neonatal health services.
- With regards to external partners, work carried out with the Neonatal Alliance for Latin America and the Caribbean constitutes the most important collaboration for the dissemination of evidence-based neonatal interventions and the strengthening and advocacy for the health approach of the newborn in the Region. With regards to birth defects surveillance, PAHO worked jointly with the International Clearinghouse for Birth Defects and with the March of Dimes, both in the formulation of advocacy tools and in strengthening national capacities for the implementation of surveillance systems.
- In terms of advocacy for the reduction of maternal mortality. PAHO is an active member of the Regional Task Force for the reduction of maternal mortality (GTR for its acronym in Spanish). This task force is constituted by the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), the United States Agency for International Development (USAID), the Maternal Child Survival Program (MCSP), the International Federation of Obstetrics and Gynecologists (FIGO)/ Latin American Federation of Obstetrics and Gynecologists (FLASOG), the International Confederation of Midwives (ICM) and other members. As part of this taskforce, PAHO have actively worked in the promotion of respectful maternal treatment and updating key persons of LAC's ministries of health, in evidence-based practices regarding antenatal care, intra partum and emergency care. At the same time, this group is discussing the best way to approach the joint work on maternal health through the document of Inter Agency Strategic Consensus.
- Regarding the improving of maternal death surveillance and response we have participated in the Maternal and Perinatal Death Surveillance and Response Technical Working Group which is integrated by WHO, UNFPA, UNICEF, USAID, MCSP, CDC and others.
- The approach for the surveillance of maternal near miss was also developed with an inter-programmatic approach. To establish an agreement on a regional standard, partners like WHO, Jhpiego, FIGO / FLASOG, ICM, some universities and health ministries with experience in this topic worked jointly to consider a standard definition for the region.
- Work conducted under the Health Information Systems (HIS) component of the PAHO-USAID Umbrella Grant is linked to the strengthening of all information systems which guide overall decision making for TB, malaria, NID, and reproductive, maternal, newborn, child and adolescent health (RMNCAH)

interventions. PAHO is seeking to integrate IS4H technical cooperation with existing areas of work that have been delivered through the RELAC SIS network. Moving forward, PAHO will collaborate with CLAP to include an inequality monitoring module within the Perinatal Information System (SIP, by its Spanish acronym) and to conduct an analysis of existing data from Uruguay as a first step towards expanding this effort to other countries

- As part of the work done to develop competencies for health professionals and community health workers, the USAID project also contributes to and leverages cross sectoral collaboration with other agencies, NGOs and actors supporting transformative health professions education towards health equity. During this year this component of the project has collaborated with the following institutions: The Network towards Unity for Health, THEnet – Training for Health Equity network, World Federation of Medical Education, World Organization of Family Doctors, Confederación Iberoamericana de Medicina Familiar, Pan American Federation of Associations of Medical Schools, Asociación Latinoamericana de Facultades y Escuelas de Medicina, International Federation of Medical Students Associations.

4. Progress toward Grant Outcome Indicators

The table below includes the identified outcomes, related indicators, and baseline and target information established for the grant and provides a summary of the progress obtained as of the end of Year 3 (September 2019).

Topic	Outcomes	Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Progress attained as of September 2019 and comments
1 Tuberculosis	1.1, 1.2	TB treatment coverage. Number of new and relapse cases that were notified and treated, divided by the estimated number of incident TB cases in the same year, expressed as a percentage. Baseline: 81%	≥90%	2% increase	81% (2018 latest available information)
		Drug susceptibility testing (DST) coverage for TB patients. Number of TB patients with DST results for at least rifampicin divided by the total number of notified (new retreatment) cases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g. Xpert MTB/RIF) as well as conventional phenotypic DST results. Baseline: 40%	≥95%	11% increase	NA
		Documentation of HIV status among TB patients. Number of new and relapse TB patients with documented HIV status divided by the number of new and relapse TB patients notified in the same year, expressed as a percentage. Baseline: 74%	≥95%	4% increase	82%
	1.2	Number of international policies, guidelines, and research studies in TB diagnosis, treatment, and prevention published with support from USAID. Policies, guidelines and studies that include input from TB experts at USAID and/or for which technical assistance needed to be developed was funded by USAID. Baseline: N/A	N/A	N/A	0
	1.2	Number of countries introducing TB diagnosis and treatment interventions with USAID support. This can include new technologies to support TB diagnosis or new TB treatment regimens. Baseline: N/A	N/A	N/A	NA

Topic	Outcomes	Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Results as of September 2019 and Comments
2 Malaria	2.1., 2.2., 2.3	Percent reduction in malaria morbidity compared with 2015 official figures. Baseline: 451,244 (2015)	≥40%	16%	69% overall increase, including VEN; 14% overall increase without VEN
	2.1	Number of malaria-endemic countries with no stock-outs of key anti-malarials at the national level in a given year Baseline: 19 countries	21 countries ⁵	21 countries	16/19 countries
	2.1, 2.2, 2.3	Number of countries implementing strategies to address malaria among populations in situations of vulnerability Baseline: 10 countries	18 countries ⁶	12 countries	17 countries
	2.1	Number of artemisinin-based combination therapy (ACT) treatments purchased with USG funds Baseline: N/A	N/A ⁷	N/A	N/A
	N/A	Number of malaria rapid diagnostic tests (RDTs) purchased with USG funds Baseline: N/A	N/A ³	N/A	N/A

⁵ From the 21 endemic countries, PAHO will support five countries (ARG, BOL, GUF, PRY, VEN) as these countries cannot benefit from USAID funds.

⁶ ARG, PRY and HTI are excluded from this indicator

⁷ These commodities will be purchased to prevent country stock outs, as well as for emergencies, and to treat travelers coming from areas where chloroquine resistance is known. These commodities will be managed from PAHO's regional warehouse.

Topic	Outcomes	Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Results as of September 2019 and Comments
3 Neglected Infectious Diseases	3.1	Number of endemic countries and territories implementing a national or subnational plan, program, or strategy to reduce the burden of priority NIDs according to their epidemiological status, in line with the WHO Roadmap to Reduce the Burden of Neglected Tropical Diseases (Accelerating Work to Overcome the Global Impact of Neglected Tropical Diseases: A Roadmap for Implementation) Baseline: 9 countries	15 countries	2 countries	Countries that were implementing a national or subnational plan, program or strategy include Mexico, Guatemala Honduras, El Salvador, Nicaragua, Colombia, Peru, Bolivia, Paraguay, Brazil, Guyana, Haiti and Dominican Republic (13).
		Number of NID-endemic countries that have achieved the goals of elimination of one or more NID and have developed and put in place measures to prevent disease resurgence or reintroduction of onchocerciasis, lymphatic filariasis and blinding trachoma. <i>For onchocerciasis:</i> Baseline: 3 countries <i>For lymphatic filariasis:</i> Baseline: 3 countries <i>For blinding trachoma:</i> Baseline: 0	<i>Oncho:</i> 6 countries <i>LF:</i> 6 countries <i>Blinding trachoma:</i> 4 countries	Oncho: 4 LF: 1 ⁸ Trachoma: 1	Oncho: Brazil and Venezuela have had progress towards the elimination of onchocerciasis but will likely not achieve the goal by 2021. LF: Brazil and Dominican Republic interrupted transmission of LF transmission in their active foci in 2018 Trachoma: Mexico was validated as having eliminated trachoma as a public health problem in 2017.

⁸ *Brazil is expected to achieve interruption of transmission of LF in its only active transmission area in 2018.

Topic		Outcomes	Indicators			
			Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Results as of September 2019 and Comments
4	Neonatal Health	4.1	Number of countries with updated goals on newborn and fetal mortality in alignment with Every Woman, Every Child, Every Adolescent global strategy and Every Newborn Action Plan (ENAP). Baseline: 3	10	6	7
			Number of countries collecting quality data on fetal and newborn health Baseline: 12	17	15	16

Topic		Outcomes	Indicators			
			Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Results as of September 2019 and Comments
5	Maternal Health	5.2	Number of lead midwifery/nursing teachers trained in CBE framework Baseline: 64	60	12	32 (10 MEX, 6 PER, 6 BRA, 3 URU, 4 JAM and 3 T&T)
			Number of new professionals (university, midwives, MOH) trained in evaluation models Baseline: 0	100	20	11 (1 BRB, 1 BRA, 2 GUY, 1 JAM, 1 SKT, 1 STL, 2 BAH and 5 T&T)
			Number of LAC midwives/obstetric nurse associations that implement plans to adhere to regulations of midwifery practices in their countries Baseline: 1	At least 4	1	1 ARG (Process was initiated and just has the approval of the Chambers of Deputies)
			Number of countries where MCPC Manual 2nd Edition is adopted as an educational instrument Baseline: 0	16	4	5 (BRB, BRA, JAM, SKN and HND).

Topic	Outcomes	Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Results as of September 2019 and Comments
6	Inequities across the Life Course	Ratio of USAID funding to other dollars leveraged towards partnership goals (EWEC-LAC) Baseline: N/A	N/A	N/A	Pending ⁹
		6.2	Number of countries that have received national and local sensitization trainings on the underlying concepts and principles of health equity in the context of LAC. Baseline: 7 countries	22 countries	10 countries
		Number of countries who have developed and/or implemented national plans to incorporate equity-based approaches into existing national and local health efforts Baseline: 0 countries	15 countries	3 countries	3 countries
	6.3	Number of countries that have received national and local trainings in the analysis of data in order to measure health inequalities ¹⁰ Baseline: 10 countries	22 countries	7 countries	7 countries
		Number of countries that have developed informational materials related to RMNCAH inequalities and officially communicated these with national policy and decision makers Baseline: 7 countries	22 countries	8 countries	3 countries
		Number of countries who have developed and/or implemented national plans of action to incorporate health inequality measurement and monitoring into existing national and local health information systems Baseline: 0 countries	15 countries	3 countries	1 country

⁹ PAHO has requested partners to report on the co-funding received by other members of and/or donors to the partnership but this information is still pending.

¹⁰ PAHO will provide progress reports to document the number of professionals trained through Metrics and Monitoring Working Group (M MWG) events.

Topic	Outcomes	Indicators			
		Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Results as of September 2019 and Comments
7 Health Information Systems	7.1	Number of countries that actively participate in the Latin American and Caribbean Network for Strengthening Health Information Systems (RELAC SIS) Baseline: 13 countries (2016)	29	4 additional countries	12 additional countries in the English-speaking Caribbean (BHS, BRB, DMA, GRD, GUY, HTI, JAM, KNA, VCT, LCA, SUR, TTO) are now part of RELAC SIS and involved in specific activities
	7.1	Number of countries that have conducted a recent national assessment of their information systems for health Baseline: 0	29	7 additional countries	In coordination with WB, we prepared national assessment on VS: SLV, CRI, PRY, PAN, HND, PER and under the framework of IS4H: SUR, GUY, JAM, ECU, PRY
	7.1	Ratio of USAID funding to other dollars leveraged towards partnership goals Baseline: N/A	N/A	N/A	No quantitative data is currently available. PAHO/WHO Collaborating Centers for the Family of International Classifications (FIC) in Argentina and Mexico contribute significant staff time to deliver trainings, seminars, and respond to queries from ICD coders across the Region on morbidity and mortality cases which do not have obvious ICD codes. The staff time provided by the governments of Argentina and Mexico are fundamental in the triangular cooperation approach that characterizes the RELAC SIS Network

Topic	Outcomes	Indicators				
		Proposed baseline 2016 (2014 & 2015 data)	5-Year Target (2021)	Proposed annual target FY 2018	Results as of September 2019 and Comments	
8	Health Systems Strengthening	Number of countries and territories that have a national health sector plan or strategy with defined equity-sensitive goals/targets revised within the last five years Baseline: 14 countries	19 countries	2 countries and territories	3 countries and territories	
		8.1	Number of countries and territories that have financial strategies for universal access to health and universal health coverage Baseline: 15 countries	21 countries	2 countries and territories	3 countries and territories
			Number of countries and territories that have analyzed and reported progress toward universal access to health and universal health coverage using the framework for monitoring and evaluation Baseline: 4 countries	15 countries	2 countries and territories	4 countries and territories
	8.2	Number of countries and territories with national policies on access, quality, and use of medicines and other health technologies updated Baseline: 10 countries	15 countries	2 countries and territories	This indicator will be evaluated at the end of 2019.	
	8.3	Countries enabled to develop and implement human resources for health (HRH) policies and/or plans to achieve universal access to health and universal health coverage Baseline: 11 countries	18 countries	2 countries	3 countries: Advances in Colombia, Jamaica and Perú directly related with the transformation of health professions and interprofessional education	

5. Products Developed during Current Project Period

The products that were developed through the support of the PAHO-USAID grant and linked to key deliverables during the reporting period are included below. When possible, links to the product are included or they were shared electronically. Otherwise, materials are also available upon request.

Tuberculosis-related products:

1. Report of National Tuberculosis Program (NTP) and laboratory manager's meeting (electronic file)
2. TB regional report 2018:
http://iris.paho.org/xmlui/bitstream/handle/123456789/49510/PAHOCDE18036_eng?sequence=1&isAllowed=y
3. World TB Day 2019 materials:
https://www.paho.org/hq/index.php?option=com_content&view=article&id=12932:dia-mundial-de-la-tuberculosis&Itemid=42255&lang=en
4. WHO TB translated documents into Spanish: <http://iris.paho.org/xmlui/handle/123456789/50723> and <http://iris.paho.org/xmlui/handle/123456789/50986>
5. Report 9th rotation in Center of Excellence (electronic file)
6. Reports on TB monitoring visits and Epi-reviews in Spanish available upon request.

Malaria-related products¹¹:

7. Malaria case management guidelines (Honduras)
8. EQAP 7th round preliminary results available upon request. Final report will be available at the end
9. of October 2019.
10. Implementation of double primaquine dose for radical treatment in *P. vivax* to prevent relapses.
11. Document for guiding strategic approach
12. In vivo, TES study results available two studies regarding efficacy of Artemether 20mg Lumefantrine 120 mg as per first line treatment for *P. falciparum* non-complicated malaria one for Colombia and another for Guyana.
13. Regional Bulletin. Antimalarial availability
14. Projeto piloto de Farmacovigilância ativa aos antimaláricos. Avances Brasil
15. Data dashboards (Guatemala, Panamá, Colombia)
16. World Malaria Report-2018 published (Americas data reviewed) and interactive Malaria Statistics updated at: www.paho.org/malariastats
17. Situation of malaria in the Americas 2017. Report 2019
18. Malaria by municipality available at: www.paho.org/malariamaps. Excel-based case notification and analysis tool is available and can be shared upon request (free for public use)
19. Malaria situation in the Americas
20. Malaria surveillance system in Guyana. Technical document
21. Malaria consultants roster workshop on 11-12 November 2018. Key questions and answers document developed.
22. Malaria Research Agenda in the Context of Policy Development. Draft

¹¹ All Malaria documents can be accessed via: <https://www.dropbox.com/sh/dsoxpsfk6s4hx95/AAdu1fjzVFZxrn4v-yRAqvnua?dl=0> and will also be provided via electronic files

23. Guyana Malaria Program Review
23. Consultation Meeting on Addressing Malaria in High-burden Municipalities / Regional Malaria Partners' Meeting in Washington DC on 5 November 2018. Report of discussions and conclusions. Available at:
https://www.paho.org/hq/index.php?option=com_content&view=article&id=14888:paho-convenes-regional-partners-and-mayors-of-municipalities-with-high-malaria-burden&Itemid=40264&lang=en
25. Report of the fourth meeting of the Malaria Technical Advisory Group (Malaria TAG), convened on May 29-31, 2019 at PAHO Headquarters in Washington DC, Available at:
https://www.paho.org/hq/index.php?option=com_docman&view=download&slug=fourth-malaria-technical-advisory-group-meeting-report-may-washington-dc&Itemid=270&lang=en
26. Manual of malaria stratification and elimination of the transmission in the malaria foci.
27. Methodology for the evaluation of zero malaria cases or under-registration of cases at subnational
28. level. Draft Malaria Risk Stratification Maps and microstratification
29. Regional Meeting of National Malaria Programs Coordinators in Washington DC on 14-16 November 2018. Report of discussions and conclusions
30. Regional meeting on malaria elimination conducted in Manaus, Brazil August 12 to 14, 2019,
31. meeting information and report available at www.paho.org
32. Update of framework for the elimination of *P. falciparum* in South America. Draft
33. Mass Drug Administration for *Plasmodium vivax*. Draft for developing a technical cooperation framework.
34. Reports of direct technical cooperation in the implementation of the strategies towards malaria elimination in 5 high-burden malaria municipalities in the Colombian Pacific Coast (Guapi, Buenaventura, Tumaco, Quibdó) and the Colombian-Venezuelan Border (Cumaribo) as a new approach implementing DTI-R. Preliminary progress reports by municipality available.

NIDs-related products:

35. Photos LF remapping survey in Guyana:
<https://www.flickr.com/photos/pahowho/albums/72157706577608785>
36. Video on LF Elimination in Guyana: https://www.youtube.com/watch?v=dECZQBh_xnk

Neonatal health-related products:

37. The technical document, "Present and future of Birth Defects Surveillance in the Americas" (in print). (electronic file)
38. A repository of information to be presented shortly on the PAHO website includes the following:

- a. Situation and challenges in neonatal health (preventable cause of neonatal mortality; health conditions that affect human capital throughout the life course and social capital; inequalities in neonatal health).
 - b. Strategies and Plan of Actions (Global Strategy for Women's Children's and Adolescent's Health (2016-2030); Plan of Action for Women's Children's and Adolescent's Health (2018-2030).
 - c. Data and statistics
 - d. Strategic partners (Neonatal Alliance for Latin America and the Caribbean, March of Dimes; PAHO / WHO Collaborating Centers in neonatal health.
 - e. Materials of interest for health teams in newborn care (includes clinical practice guidelines, technical documents, videos and training materials, etc.) Ordered in a practical sequence of intervention that progresses temporarily in moments of care, each of which presents a different level of complexity. The repository presents the title of the document / instrument, the type of evidence on which it is based, the year of publication, the language in which it is available, a brief description of the content and the link to the website where the material is available)
39. The technical document "Guideline of clinical practice informed in the evidence for the follow-up of newborns at risk" (in print). (Electronic file)
 40. Online Birth Defects Surveillance Course-"First online training course for Eastern Caribbean Countries ICBD-PAHO"
 41. Video from the activity in ECC (electronic video file)

Maternal health-related products:

42. Maternal and Perinatal Death Surveillance and Response (MDSR) web-based self-tutorial course (Available 1 November) Available at:
<https://onedrive.live.com/?authkey=%21AOuzzbgYKfKAXzY&id=3688A4E6C4A6CE41%21632235&cid=3688A4E6C4A6CE41>
43. Documentation developed as part of the regional consensus on the surveillance of Maternal Near Miss. Available at:
<https://onedrive.live.com/?authkey=%21AJ10pvc2jE6TbBw&id=3688A4E6C4A6CE41%21632237&cid=3688A4E6C4A6CE41>
44. Agenda and other documentation from the GTR meeting (July 2019) to update recommendations and guidelines for maternal care. Available at:
<https://drive.google.com/drive/folders/1uHqghf9WypQNWeJP1KhWFOzfLBSj3zkV>
45. Documentation of educational interventions carried out in hospitals of the CLAP network to improve the use of evidence-based practices. Available at:
<https://onedrive.live.com/?authkey=%21AHAzHYhpE4%2DO75A&id=3688A4E6C4A6CE41%21632244&cid=3688A4E6C4A6CE41>
46. CBE Workshop on Evaluation for Caribbean Midwives. Available at:
<https://onedrive.live.com/?authkey=%21AMQIDHGfuju7jow&id=3688A4E6C4A6CE41%21632249&cid=3688A4E6C4A6CE41>

Inequities-related products:

47. [Plan of Action For Women's, Children's and Adolescents' Health 2018-2030](#)
48. [Guide for Implementing the Global Strategy for Women's, Children's and Adolescents' Health in Latin America and the Caribbean ENG / SPA](#)

Health information systems-related products:

49. General information on Information Systems for Health (IS4H) can be found at: <https://www.paho.org/ish/index.php/en/>
50. The IS4H Toolkit, which contains knowledge capsules, conceptual information, factsheets, and tools, can be found: <https://www.paho.org/ish/index.php/en/toolkit>
51. The RELACSYS Network Portal can be found at: <http://www.paho.org/relacsis/index.php/en/>
52. A video from the IX RELACSYS Regional Meeting (5-7 August 2019) can be found at:
53. <http://www.paho.org/relacsis/index.php/es/biblioteca-usuarios/reuniones-relacsis/ix-reunion-argentina>
54. RELACSYS Network featured in the WHO publication, "Promoting Health through South-South and Triangular Cooperation: Selected WHO Country Case Studies."
https://gallery.mailchimp.com/487855692ac2aa91b795e38af/files/9b5fae36-1f0f-48af-a59f-d7ab43559453/WHO_SSTC_booklet_1_.pdf
55. Virtual courses on ICD-10 coding, the correct completion of death certificates, among others, can be found at:
56. <http://www.paho.org/relacsis/index.php/en/biblioteca-usuarios/cursos-virtuales>
57. RELACSYS virtual sessions (webinars) can be accessed at the RELACSYS website:
<http://www.paho.org/relacsis/index.php/es/webinars-relacsis/1089-censos-e-informacion-de-salud-serie-de-webinars>
58. Information on RELACSYS courses can be found at:
<http://www.paho.org/relacsis/index.php/biblioteca-usuarios/cursos-virtuales>
59. Videos available on the RELACSYS portal can be found at:
<http://www.paho.org/relacsis/index.php/biblioteca-usuarios/videos-relacsis>
60. Recent discussions on the "Dr. Roberto A. Becker" forum can be consulted at this link:
<http://www.paho.org/relacsis/index.php/foros-relacsis/foro-becker-fci-oms>
61. Sessions and webinars are available online at this link:
<http://www.paho.org/relacsis/index.php/biblioteca-usuarios/webinars-relacsis>
62. Links to the BIRMM webinar can be found at this link:
<http://www.paho.org/relacsis/index.php/biblioteca-usuarios/webinars-relacsis/item/968-birrm-webinar-1-una-metodologia-para-mejorar-el-registro-de-muertes-relacionadas-al-embarazo-parto-o-puerperio>
63. Information on the II Regional Workshop on the Intentional Search and Reclassification of Maternal Deaths in Mexico City, Mexico from 7-8 November 2019 can be found at this link:
<http://www.paho.org/relacsis/index.php/noticias/item/1003-ii-taller-regional-de-busqueda-intencionada-y-reclasificacion-de-muertes-maternas-noviembre-2018-ciudad-de-mexico>

Health systems strengthening-related products:

Health Financing and Fiscal Space

64. Reports NHI. Article NHI: National Health Insurance: A conceptual framework from conflicting typologies. <https://www.sciencedirect.com/science/article/pii/S0168851019301307?via%3Dihub>
65. Report PPP. Draft Report Payments System for Peru.
66. Concept Note Dominican Republic.
67. Report about Peru Financing Matrices and Budgeting for results in health in Peru.
68. Manuscript ID 2019-00499, with the title "Socioeconomic inequalities in access to seeking health services in four Latin American countries," has been submitted to the Pan American Journal of Public Health, and has been reviewed and accepted by peers

Improving Information for Selection and Availability of Essential Medicines within Health Services¹²

Paraguay:

69. PAR 02 Plan de trabajo (plan de mejoramiento del sistema de suministro del Ministerio de Salud de Paraguay)
70. PAR 04 Hoja ruta creación modelo SISMED (pasos requeridos para construcción del modelo de gestión del sistema integral de suministro de medicamentos y dispositivos médicos)
71. PAR 05 Acta seguimiento plan de trabajo feb 2019
72. PAR 10 Borrador modelo sistema de suministro 2019 sept 17 (documento aun en construcción del modelo de gestión del sistema de integral de suministro de medicamentos y dispositivos médicos para Ministerio de Salud de Paraguay)
73. PAR 11 Informe misión fortalecimiento sistema de suministro junio 2019
74. PAR 12 Verificación disponibilidad trazadores HGBO feb 2019 (aplicación del instrumento para medir disponibilidad a partir de la lista de medicamentos trazadores materno infantil, aplicado en febrero y en octubre del 2019, se hará nuevamente la aplicación)
75. PAR 13 Acta #1 conformación CFT HGBO (acta de conformación del Comité de Farmacoterapia del HGBO)

Guyana:

Travel reports:

76. https://intra.paho.org/tools/TR/PDF/Dath_HSS_Guyana_24104_2018.pdf
77. https://intra.paho.org/tools/TR/PDF/Dath_HSS_Guyana_24907_2018.pdf
78. https://intra.paho.org/tools/TR/PDF/Dath_HSS__26676_2018.pdf
79. https://intra.paho.org/tools/TR/PDF/Dath_HSS_Guyana_27672_2019.pdf

Develop Competencies for Health Professionals and Community Health Workers

80. The path towards social accountability in the Americas: ISAT – Indicators for Social Accountability Tool (National and regional implementation workshops held in Brazil, Colombia, Chile, Argentina, Perú, Jamaica, Barbados and Trinidad and Tobago / International workshops held in Australia, United States of America, Colombia and Perú).

¹² The products referenced in this subsection can be found via: https://paho-my.sharepoint.com/personal/pabloalc_paho_org; (archivos/otros proyectos/USAID)

81. Community health workers – CHWs: Expanding roles in health care delivery systems for refugees, indigenous communities and interprofessional teams (Workshop developed in collaboration with PAHO/WHO CC University of New Mexico)
82. Tracking graduates: At the core of social accountability (Workshop developed in collaboration with THEnet – Training for Health Equity Network based on two white papers produced under this project)
83. Interprofessional health education networks in Latin America and the Caribbean: Situation analysis and implementation plans in 19 countries. (Report and published article).
84. Pipelines, recruitment and selection of medical students for rural practice (Workshop developed in collaboration with PAHO/WHO CC University of Illinois at Rockford based on a white paper produced under this project)
85. Country experiences on ISAT instrument implementation at medical schools in Latin America and the Caribbean (University of West Indies-Campuses in Jamaica, Barbados and Trinidad and Tobago; Escola Multicampi do Ciencias Medicas-Rio Grande do Norte-Brazil; Escola de Ciencias Medicas – Roraima- Brazil; Facultad de Medicina, Universidad del Litoral -Santa Fe- Argentina)

Products mentioned above, developed under this grant, have served as inputs and/or have been shared, disseminated and implemented through the following publications and events:

Declarations and articles

Cartagena Declaration: Pan American medical schools, social mission and primary health care
<https://www.fepafempafams.org/images/pdf/CARTAGENA.pdf>

Relevant to note that this declaration was also subscribed by the American and Canadian Associations of Medical Schools (AAMS & CAMS)

Darwin Declaration: Achieving equitable health care by responding to population health needs
<http://thenetworktufh.org/>

Transforming health professions education to advance toward universal health
<https://bit.ly/2MtF09f>

Interprofessional health education networks in Latin America and the Caribbean: Situation analysis and implementation plans in 19 countries.
<https://bit.ly/2ZRfWZb>

Workshops and presentations

TUFH 2019- The Network Towards Unity for Health Global Conference - 40th Anniversary. Darwin-Australia, 9th-13th September 2019 / "Social accountability: From evidence to Action"
<https://www.tufh2019.com/>
<http://tufh2020.com/>

Dr Daniel Blumenthal's Memorial @ Morehouse School of Medicine MSM --Atlanta (USA), 22nd September 2019

Dr Blumenthal introduced MSM in the Consortium and was working on a white paper on community engagement for this project

<https://www.youtube.com/watch?v=Nn9k0YHIPhM>

XXIII Conferencia de la Asociación Latinoamericana y del Caribe de Facultades y Escuelas de Medicina (ALAFEM-UDUAL) (Lima-Perú, May 29- 30 2019)

http://alafem_udual.facmed.unam.mx/XXIII.pdf

CIEM2019 - V Congreso Internacional de Educación Médica - ASPEFAM 2019 (Lima-Perú, May 31 – June 1, 2019 de Junio de 2019)

<http://www.aspefam.org.pe/ciem2019/>

Congreso Mundial de Educación Médica – ASCOFAME 60 años / XXI Conferencia Panamericana de Educación Médica de FEPAFEM (Cartagena, Colombia 23-26 March 2019)

<http://ascofame.org.co/congreso2019/>

<http://www.fepafempafams.org/#>

Segunda Reunión Internacional de Facultades de Medicina por la Calidad de la Formación del Recurso Humano en Salud y la Salud Universal (Santiago de Chile, 11th January de 2019)

<http://www.medicina.uchile.cl/noticias/ii-reunion-internacional-de-facultades-de-medicina>

Annual General Meeting of The Caribbean Association of Medical Councils- CAMC (Port of Spain -TRT, 8th-9th December 2018)

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

Symposium on Global Health Equity: Envisioning the future. Morehouse School of Medicine (MSM), Atlanta-USA. (28th November 2018)

<https://www.msm.edu/globalhealth/symposium/>

<https://www.msm.edu/globalhealth/symposium/agenda.php>

6. PAHO-USAID Collaboration Success Stories

The success stories included below attempt to illustrate how the collaboration between PAHO and USAID strives to improve people's lives and make a difference in the beneficiary country.

Addressing a key TB vulnerable population: Indigenous peoples

Indigenous peoples are vulnerable populations for TB as key social determinants for this disease are present in these ethnic groups; among them, poverty, social exclusion, poor living conditions and limited access to health services. These factors increase the chances for transmission of TB, development of the disease, and risk of death due to it. Besides, diverse cultural aspects and beliefs on TB are present and not considered. These need to be understood and approached in an innovative way apart from the “western medicine” perspective to facilitate prompt TB diagnosis, adherence to treatment and full recovery.

To address TB in this vulnerable group, PAHO with USAID’s support, developed a specific guidance document as a tool to support the implementation of the End TB Strategy with an intercultural approach, aligned with PAHO’s Policy on Ethnicity and Health. The document was reviewed by experts and discussed in a regional meeting held in Colombia in July 2019 on TB in indigenous peoples of the Americas.

Between July and September of this year, pilot visits to initiate the implementation of the guidance document were conducted in Colombia, Paraguay, Brazil and Guatemala. In each country, discussions with the national TB program, individuals responsible for indigenous affairs, and health authorities were held. An indigenous community, previously selected, was visited to conduct joint intercultural dialogues of knowledge that would facilitate the development of intercultural pathways for the implementation of TB prevention and control interventions. Next steps were agreed upon. These visits led the foundation for further joint work in addressing TB in these vulnerable populations.

These experiences have the potential to lead to sustainable change as key national and local actors are involved. The guidance document provides them with a concrete tool that will facilitate their commitment to implement agreed upon next steps and further develop on the initial joint intercultural work. This contributes to building self-reliance and favors expansion to other indigenous groups and country wide scale up.



Photo: Pan American Health Organization

“PAHO’s guidance document for TB prevention and control in indigenous peoples is a great tool that will facilitate the dialogue between our people and health personnel”
Indigenous representative during the regional meeting.

Innovating for Interrupting Malaria Transmission

Innovation orients malaria elimination strategy & sustained impact in Honduras, Central America.

There has been an exceptional and sustained decrease in malaria in Honduras. The country reported over 10,000 cases in 2010 and almost one-fifth of these were due to *P. falciparum*. Puerto Lempira district in Honduras had the highest incidence of malaria in the whole of Central America ($\approx 1,500$ cases in 2010). The most affected department “Gracias a Dios” is one of the poorest areas in the country. The department is highly rural and inhabited by Miskitos, an ethnic group with a different language, culture and customs than the rest of the country. Gracias a Dios had no ground communication with the rest of the country, and within the department, no paved roads exist and only few places are accessible by land.

In 2010, USAID supported an effort in the Wampusirpi municipality within Gracias a Dios to integrate bednet distribution with active malaria case detection and improvement in surveillance, which has led to the interruption of transmission of malaria in that area. This model was adopted by Honduras (as a whole) and using (collaboratively) the Global Fund grant, the model was scaled up throughout the country. In 2014, USAID funded a pilot implementation of a rapid diagnostic test (RDT) for malaria in Puerto Lempira (another area in the department of Gracias a Dios) wherein community volunteers (CHW) were trained in diagnosing and treating malaria. This again, was scaled up using the Global Fund grant and in 2018 there were more than 250 CHWs with RDTs in Gracias a Dios, substantially improving access to malaria diagnosis and treatment. The surveillance micro-stratification methodology is used as an intervention. It was developed and piloted with the support of USAID in 2016. This methodology has now been adopted by PAHO as the standard approach throughout the Americas.

In 2018 there were 600 malaria cases in the country, a 92% decline since 2010. Less than 15 locally infected cases due to *P. falciparum* have been reported in 2019, most in a focus bordering Nicaragua with interruption of transmission by this parasite in the rest of the country. The consistent and sustainable strategy of universal coverage with preventive activities (bednets and IRS), improvement in health access (through CHW network using RDTs) and improved surveillance has been the backbone of this impact attained by strategic inputs supported by the PAHO/USAID collaboration.



Innovation: Micro-stratification pilot in Honduras

Photo credit: Prabhjot Singh, PAHO/WHO



Innovation: Bednets for all “sleeping spaces” integrated with improved surveillance

Photo credit: Unknown, SESAL - Honduras



Continuing Challenges: A house with malaria cases above a pond of water in Puerto Lempira, Honduras

Photo credit: Prabhjot Singh, PAHO/WHO

Improvements in Perinatal Care in the Eastern Caribbean Countries

ECC counties improve practices and management through a multipartner collaborative approach toward reducing preventable neonatal mortality and improving quality of life

Newborn health is perceived as a big concern by ECC countries. There are challenges to be addressed in reducing neonatal and fetal mortality, but there is undoubtedly a commitment within the ECC to improve the quality of care provided to newborns. For this reason, in conjunction with other key partners, a technical meeting was coordinated to analyze the current situation and to establish guidelines for advancing in a plan to strengthen overall perinatal care.

The initial activity was a central milestone in the process. Pediatricians, nurses, neonatologists, managers, along with key stakeholders and partners from PAHO, WHO, World Pediatric Project and Rotary International participated in the initial technical meeting. The activity was a trigger for a series of actions that have continued throughout the year and beyond. Newborns and their families are the main beneficiaries of the interventions, through strengthening management and clinical care in health facilities.

The activities involved a situation analysis in neonatal health, a discussion about priorities and the coordinated approach to their resolution. Resources were mapped as essential inputs for planning (including the availability and distribution of neonatologists, pediatricians, nurses, beds and specific equipment, as well as results in mortality or morbidity, e.g. number of premature births and/or high-risk newborns). The approach allowed reaching a consensus on immediate priorities and steps for promoting regional coordination, as well as forming unified regional goals and targets in specific areas, developing a mechanism for pooled procurement of high-need medications and supplies, continued training for regional nurses and planned in-person and virtual trainings in other priority areas. Specifically, three immediate areas to be worked on were identified, namely: 1. developing respiratory support interventions; 2. improving capacity to provide total parenteral nutrition; 3. accessing pediatric cardiology interventions for congenital heart disease. These three areas are the three most closely linked to the main causes of neonatal morbidity and mortality. Because of the coordinated work, the Technical Advisory Committee of the OECS Pooled Procurement Scheme has recommended the inclusion of critical medication for these conditions. Also, a training on surveillance for birth defects also emerged as a result of these efforts. This last training is ongoing, involving professionals from ECC countries

This approach showed progress and challenges and facilitated the process of responding in terms of improving clinical practices and fundamentally the coordination between local actors and key partners, in order to improve the management of health services and finally improve perinatal outcomes in ECC countries.



Ian Moore, Nowum (video).

“The conference highlighted the strong and weak points of perinatal care in our region and showed how we can collaborate to achieve best practices.

Listening to countries’ experiences gave us an idea of who we are and where we need to be. The topics will definitely assist us in creating protocols to improve perinatal care in our NICU. (Dr. Tyhiesia Donald, pediatrician, Grenada)

“This unique and groundbreaking event generated great momentum and excitement in the regional neonatal community and laid the groundwork for strong regional collaboration moving forward. Program champions emerged and innovative strategies were discussed”. Dr. Clyde Cave, Consultant Neonatologist, Elizabeth Hospital .Barbados

Further Steps to Eliminate Lymphatic filariasis in Guyana.

Remapping survey: Making decisions to ensure that “no one is left behind”

Guyana implemented mass drug administration (MDA-DA) to eliminate lymphatic filariasis (LF) in the four regions (III, IV, V and X) with the highest levels of infection during 2017 and 2018, but to achieve their elimination goal, all target populations living in the remaining endemic areas must receive Preventive Chemotherapy. The six “naïve” regions (I, II, VI, VII, VIII and IX) represent 87.3% (187,782 km²) of the territory of Guyana, but only 25.1% of its population (187,842 inhabitants). Most of these areas face logistic, transportation and communication challenges because they are scattered settlements in dense rainforest areas and in hard-to-reach villages.

To make effective decisions, Guyana needed updated and accurate information about the focal level of LF transmission in these six regions. During 2018-2019, a remapping survey was implemented using a sampling strategy to provide representative results in small areas where low levels of infection were expected. To identify focal transmission, a total of 33 Evaluation Units were defined, combining demographic and epidemiologic criteria such as: aggregation of clusters of villages, socio-economic similarities, areas reported as isolated transmission foci in survey-2001, densely populated areas not grouped with sparsely populated areas, indigenous settlements and villages along international borders.

The field teams and supervisors, composed by personnel of the Ministry of Public Health and medical technologists graduated from the University of Guyana were trained by the Centres for Disease Control and Prevention (CDC), Tropical Data and the Pan American Health Organization/World Health Organization on the methods and tools to select and interview the study population, collect data using a mobile application developed by Tropical Data, take blood samples to estimate the level of transmission using the Alere Filariasis Test Strip (FTS) and Dried Blood Spots (DBS) to detect antibodies against LF and other diseases of public health relevance. This learning experience, combining training, working in the field and supportive supervision, improved knowledge, skills and performance of the teams. It also strengthened human resources capacities and country’s abilities to plan, estimate budget and costs, define logistics, coordinate with governmental sectors, partners, NGOs and community leaders to properly inform them about the survey and implement solutions to solve problems. This survey was also an opportunity to generate information about the sero-epidemiological profiles of neglected, water and food-borne diseases, and vaccine- preventable diseases to support public health decision making.



Guyana’s LF remapping survey. Collection of samples in school-age children for testing with Filariasis Test Strips to assess infection status. Sonia Mey-Schmidt, Multimedia Department of Communication, PAHO/WHO

“The remapping strengthened our national capacities to monitor and evaluate the impact of the interventions. It provided the information needed to decide where MDA will be implemented to achieve 100% of geographic coverage and ensure that “no one is left behind”,

Dr. Horace Cox, Chief of Vector Control Services of MoPH.

Transforming Information Systems for Health in Guyana

Piloting innovations for on-the-ground impact in health information

Quality health data is critical for policy and decision making that improves access to healthcare. The Ministry of Public Health of Guyana had identified the need to transform its information systems for health (IS4H) to address fragmented systems and manual, paper-based process to transition towards standardization, interoperability and modernization. The Minister of Public Health, Honorable Volda Lawrence, spearheaded a comprehensive initiative, the Guyana Health Information Systems (GHIS) under the IS4H framework endorsed by CARICOM. The first step would be to pilot GHIS with PAHO support in an outpatient setting at the East La Penitence Health Center (ELPHC) in Georgetown.

Following a rapid country assessment in 2017, PAHO collaborated with key stakeholders to develop and strategize a way forward with help from the Strategic Information Technical Working Group (SI-TWG) and an implementation team. Armed with this assessment, in February 2018, the team began implementing a series of measures to build staff technological capacities and integrate GHIS processes, infrastructure, and systems for key operations ranging from patient registration, triage, and consultations to drug prescriptions.

The facility manager, Dr. Keisha Chin, is pleased with the result. Information is now more accessible and organized. Staff have seen improvements in patient follow up and patients appreciate that record processing is faster and wait times have reduced with the automation of process to access information. The process was challenging but the results are tangible. “We were able to keep constant contact with personnel from the Ministry of Public Health, as well as PAHO/WHO staff and consultants, who visited regularly and updated us on everything that was taking place, as well as including me and my staff to give feedback during development and implementation.”

The lessons learnt from this experience have been instrumental as the government expands the GHIS across Guyana. Much work remains, but the generous support of USAID, PAHO’s technical know-how, and the strong political commitment of Guyana’s government have allowed the country to establish the building blocks for this initiative as it seeks to contribute to healthier lives.



Dr. Keisha Chin, Facility Manager, East La Penitence Health Center

Dr. Keisha Chin, Manager, East La Penitence Health Center at work on the GHIS. Photo credit: PAHO/WHO Guyana, Ms. Angela Hoyte.

“Despite some challenges, the GHIS pilot has overall been beneficial to myself, my staff and by extension my patients.”
– Dr. Keisha Chin, Manager, East La Penitence Health Center