

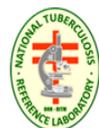
USAID-SIAPS Technical Assistance to NTP Laboratory Network: Strengthening Leadership, Management, and Governance Capacity

December 2017

Arthur B. Lagos
Lynette P. Adorio-Arce



USAID **SIAPS** 
FROM THE AMERICAN PEOPLE Systems for Improved Access
to Pharmaceuticals and Services



This report is made possible by the generous support of the American people through the US Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-11-00021. The contents are the responsibility of Management Sciences for Health and do not necessarily reflect the views of USAID or the United States Government.

About SIAPS

The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to ensure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS result areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

Recommended Citation

This report may be reproduced if credit is given to SIAPS. Please use the following citation.

Lagos AB, Adorio-Arce LP. 2017. *USAID-SIAPS Technical Assistance to NTP Laboratory Network: Strengthening Leadership, Management, and Governance*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

Key Words

Philippines, TB, laboratory

Systems for Improved Access to Pharmaceuticals and Services
Pharmaceutical & Health Technologies Group
Management Sciences for Health
4301 North Fairfax Drive, Suite 400
Arlington, VA 22203 USA
Telephone: 703.524.6575
Fax: 703.524.7898
E-mail: siaps@msh.org
Website: www.siapsprogram.org

CONTENTS

Acronyms and Abbreviations	iv
Overview.....	1
Background	1
Pharmaceutical Systems Strengthening Approach to Improve Laboratory Services.....	1
Technical Assistance Activities	3
National Level.....	3
Regional Level	5
Grassroots Level.....	5
References.....	7

ACRONYMS AND ABBREVIATIONS

BHMC	Barangay Health Management Council
DOTS	directly observed treatment, short course
DRS	drug resistance surveillance
DST	drug susceptibility testing
LGU	local government unit
LNSP	Laboratory Network Strategic Plan
LNW	laboratory network
LRD	Laboratory Research Division
MDR-TB	multidrug-resistant tuberculosis
M&E	monitoring and evaluation
MTB	Mycobacterium tuberculosis
NTP	National Tuberculosis Program
NTRL	National Tuberculosis Reference Laboratory
PhilSTEP	Philippines Strategic TB Elimination Plan Phase One 2017–2022
PMDT	programmatic management of drug-resistant TB
RDT	rapid diagnostic test
RIF	rifampicin
RITM	Research Institute for Tropical Medicine
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
TB	tuberculosis
TDU	Training and Development Unit
TOT	training of trainers
USAID	US Agency for International Development
WHO	World Health Organization
Xpert	Xpert MTB/RIF assay

OVERVIEW

Background

The Philippines is one of the world's high-burden countries for tuberculosis (TB) and multidrug-resistant tuberculosis (MDR-TB). Key findings from the 2016 Philippines national TB prevalence survey showed that about 1% of the population is afflicted with TB, with a smear+/culture+ prevalence rate of 286/100,000. Despite the high TB prevalence, only one-third of detected cases were notified in the program. The National Tuberculosis Program (NTP) is strengthening its programming through the Philippines Strategic TB Elimination Plan Phase One 2017–2022 (PhilSTEP-1). PhilSTEP-1 aims to reduce the TB burden by 2022 through the reduction of TB deaths by 50%, and reduction of TB incidence by 5%.

The NTP's strategic direction for the laboratory services as articulated in PhilSTEP-1 is to improve access to laboratory services so that all high-risk TB patients are tested using World Health Organization (WHO)-endorsed rapid diagnostic tests (RDTs) as the initial diagnostic procedure, particularly the Xpert MTB/RIF assay (Xpert). This entails the strengthening of the laboratory network (LNW) and its support systems to achieve a wider deployment and implementation of RDTs while ensuring the sustained delivery and quality of all currently employed TB diagnostic technologies, including smear microscopy, culture and drug susceptibility testing (DST), and line probe assay (LPA).

To facilitate the laboratory network strengthening processes, the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, funded by the US Agency for International Development (USAID) focused its technical assistance in strengthening the leadership, management, and governance (LMG) capacity of NTP, particularly the National Tuberculosis Reference Laboratory (NTRL), since the latter is mandated to provide technical leadership and oversight to the management of the laboratory network.

Pharmaceutical Systems Strengthening Approach to Improve Laboratory Services

SIAPS used the pharmaceutical systems strengthening (PSS) approach (figure 1) to improve the LNW leadership, management, and governance and achieve health impact. The framework shows the dynamic relationships of the five health systems building blocks (governance, human resources, information, financing, and service delivery) with a medical products building block overlay to provide focus, and to identify the areas of concern and the related corrective interventions. This approach helps achieve country-specific results that are aligned with the country's strategic plans and US Government/USAID health-related goals. SIAPS used four practices to strengthen the health system: capacity building, innovation, evidence generation, and advocacy.

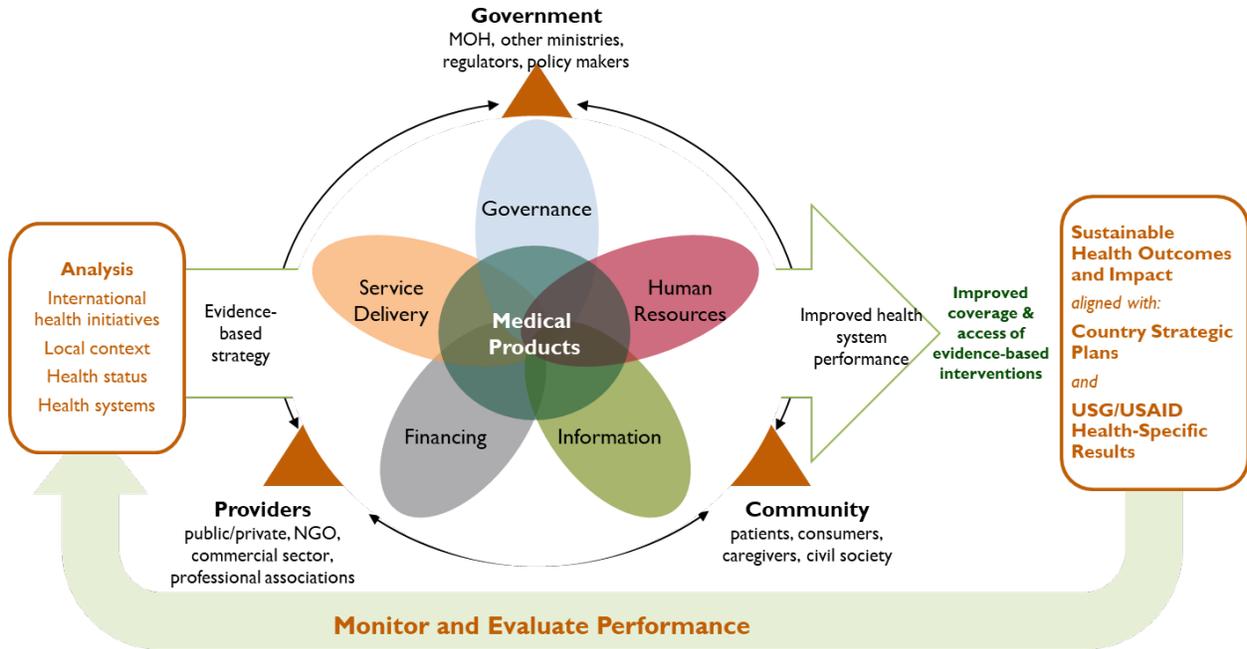
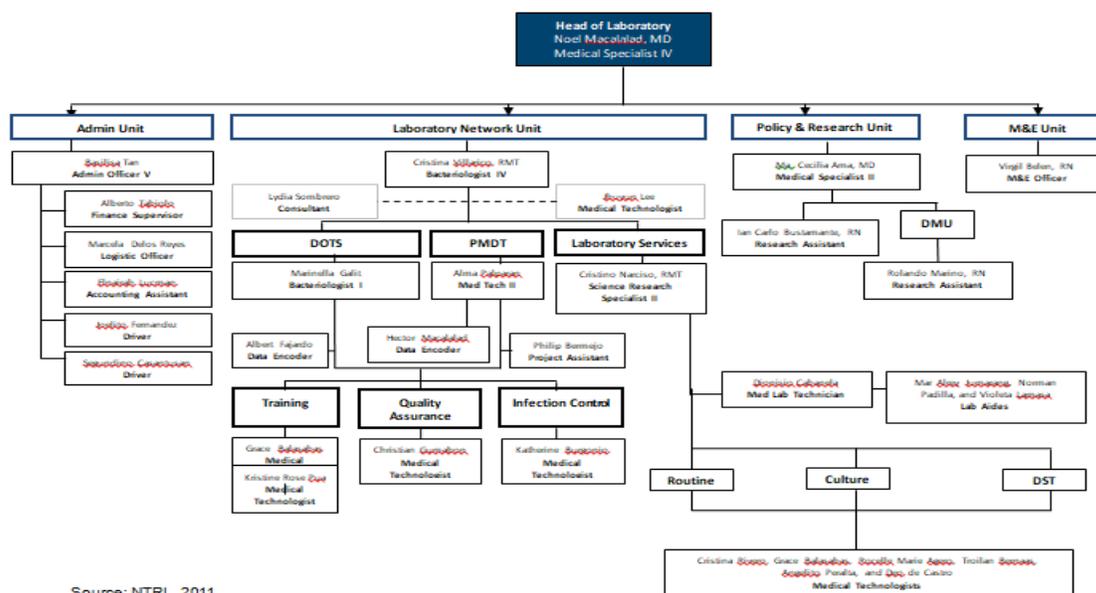


Figure 1. SIAPS systems strengthening framework

TECHNICAL ASSISTANCE ACTIVITIES

National Level

- To strengthen national LNW leadership capacity, SIAPS conducted the following activities: In 2011, we worked with NTRL to reactivate the TB subnational Laboratory Working Group, consisting of representatives of NTP, NTRL, WHO, SIAPS, and various technical partners to improve coordination and collaboration among national-level stakeholders. SIAPS worked with NTRL and the Laboratory Working Group to develop the NTP Laboratory Network Strategic Plan (LNSP: 2013–2016) in 2012.¹ The LNSP provided the strategic direction to improve access, quality, effectiveness, and sustainability of NTP laboratory services. The LNSP was approved in 2013.
- Starting in 2014, SIAPS provided technical assistance to NTRL’s efforts to improve its capacity by focusing initially on organizational strengthening. Based on the recommendations from a previous assessment of NTRL’s internal capacity, we helped NTRL revise and streamline its organizational structure (figures 2 and 3), define the individual units’ functions to avoid duplication of tasks, improve overall efficiency, and contribute to a better work climate. We developed NTRL’s internal standard operating procedures (SOPs) for information management² to improve internal coordination and collaboration. The information management SOP was approved and adopted by NTRL and the Research Institute for Tropical Medicine (RITM).



Source: NTRL, 2011

Figure 2. Prior NTRL organizational chart

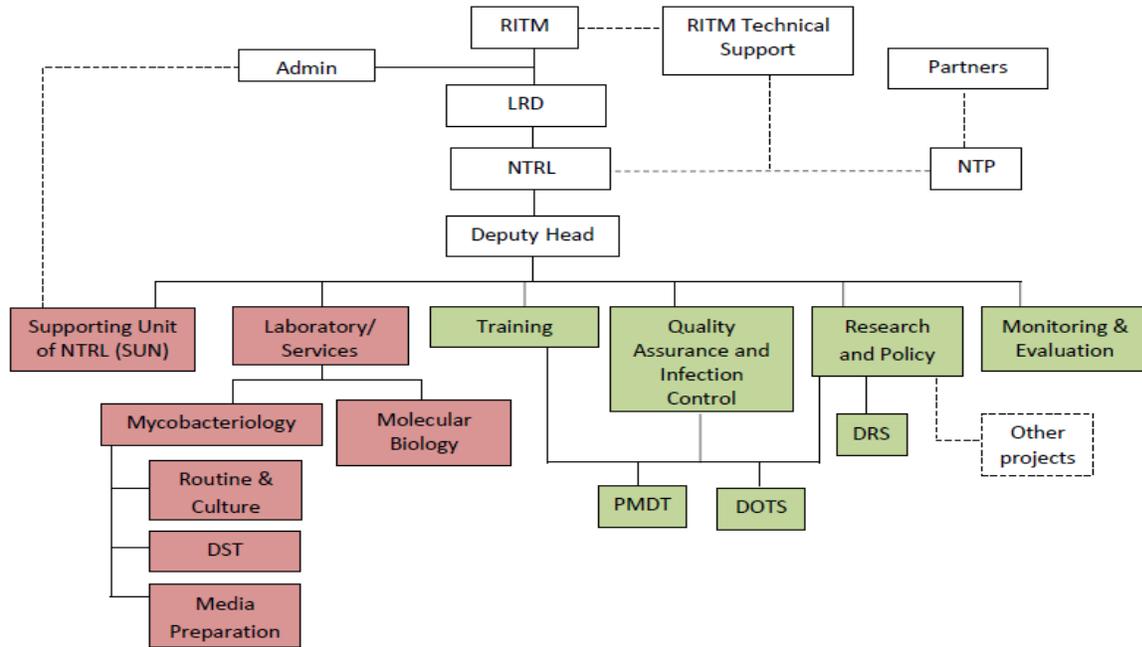


Figure 3. Revised NTRL organizational chart, 2014

To enhance NTRL’s capacity for information management, we trained selected NTRL staff in the management and use of laboratory data, encompassing all phases of information management, from data collection, organizing (using tables, charts, and graphs), analysis and interpretation, report writing and report dissemination.³

- SIAPS assisted the NTP in generating evidence and information regarding program achievements and in informing strategic directions through technical leadership in the laboratory component of the NTP Joint Program Reviews (JPR) in 2013 and 2016. The JPR analyzed the performance of the NTP, validated and documented its achievements, and identified program gaps and challenges.
- To assist in the scale-up of Xpert in the Philippines in 2013, SIAPS helped identify the appropriate selection of Xpert sites and allocation of machines.⁴ We developed for NTP and NTRL an algorithm to guide the use of Xpert use for smear-negative TB patients and selected high-risk patient groups.⁵ SIAPS also helped NTP update its *Manual of Procedures* from 2012; the updated manual was released in 2014.⁶ Toward the end of 2013, SIAPS helped create the national policy and guidelines for the scale-up and expanded use of Xpert in the TB program. The policy was approved for implementation by July 2014.⁷
- Also in 2014, SIAPS supported NTRL’s internal capacity building efforts by strengthening its management processes and practices by introducing innovations in planning, monitoring, evaluation, and information management processes. We enhanced NTRL staff’s planning skills so that planners are able to identify and analyze the problems in the LNW, and create plans that focus on addressing the priority problems.

We provided technical leadership in the development of NTRL's annual unit plans from 2014 to 2016 and monitored their implementation.

- From 2014 to 2015, we assisted NTRL's Monitoring and Evaluation (M&E) Unit in building NTRL capacity to perform M&E functions for the lab network through technical assistance to develop the LNW's M&E plan. We also helped organize the NTRL M&E working group to enable better coordination of functions related to M&E, and provide a venue to discuss program problems.⁸ SIAPS trained selected NTRL staff on techniques of carrying out monitoring for the laboratory services remotely and during field visits.⁹ We also developed a laboratory network monitoring guide for the use of the national, regional, and local government unit (LGU) coordinators.¹⁰

Regional Level

- In October 2015, we developed the NTP laboratory training decentralization strategy as part of our efforts to improve regional capacity in LNW management. In 2016, SIAPS organized an ad hoc working group composed of NTRL staff, selected regional coordinators, and a private sector trainer to develop activities for the decentralization strategy. The decentralization activities were adopted by NTRL and were included in NTRL's Training and Development Unit (TDU) annual work plan.¹¹
- As part of the decentralization activities, we worked with NTRL to develop the enhanced training of trainers (TOT) course for TB microscopy and for Xpert trainings. SIAPS supported the conduct of these two courses, which were held in July 2016 and November 2017, respectively. We worked with NTRL's TDU to develop the training materials, including Work Instructions, which will guide the trainees when they return after training to their workplaces.^{12,13} In November 2017, we worked with NTRL and the Department of Health (DOH) Regional Office Central Visayas to conduct the first TOT for Xpert training in the Philippines. This is part of the regional capacity building activities for training decentralization.
- SIAPS also collaborated with NTRL to conduct a series of planning workshops that aimed to improve the regional offices' planning of their LNW strengthening activities. SIAPS conducted an assessment of the NTP lab network's performance in 2016–2017 to inform future strategic directions in laboratory strengthening, including the expansion of RDTs.¹⁴ Using the LNW assessment findings, we helped the regional NTP teams formulate strategies that focus on specific problems and needs of their regions.¹⁵

Grassroots Level

SIAPS recognized that, to achieve sustainable improvements in pharmaceutical and laboratory management at the community level, interventions had to be embedded with an initiative that strengthened health program leadership, management, and governance, and should be a collaborative effort by the government, health partners, and the community. Unlike the

interventions at the national, regional, and provincial/city levels, community-level approaches involve close collaboration with the political, health, and social leaders in the community, as well as the people who are the key stakeholders and beneficiaries of the health programs. Moreover, the interventions should be able to address the concerns of these various stakeholders in the community.

- SIAPS and the Quezon City Health Department implemented the Barangay Health Management Council (BHMC) initiative to strengthen the community health system to support improvements in TB and other public health services.¹⁶ BHMC works in teams to enhance health leadership, management, and governance to strengthen the health system effectively, efficiently, and sustainably using community resources. The approach is based on the premise that with increased capacities, the LGUs and community health leaders would be better able to address pharmaceutical and other health system weaknesses in financing, health workforce, and information to improve the delivery of TB and other services.
- At the grassroots level, we helped selected urban poor barangays strengthen their laboratory services through our BHMC initiative in Quezon City. We helped the community health managers identify and understand the gaps in access to, and use of, diagnostic services. This was done by helping them analyze the TB situation in their communities using their own data. The community health managers were then able to design interventions that focused on specific problems, based on their situational analysis. These improved the diagnostic services and led to better case finding results and increased TB case notifications.¹⁷
- We also helped the Quezon City government develop a city ordinance that prescribes the guidelines for the scale-up of BHMCs in all barangays in the city in 2014. The city ordinance was approved in 2014 and amended in 2015.¹⁶

REFERENCES

- 1) National TB Reference Laboratory. NTP Laboratory network strategic plan: 2013–2016 (sub-plan of PhilPACT). Manila: Department of Health; 2017.
- 2) Adorio-Arce LP, Lagos AB. Standard operating procedures for information management in NTRL. Manila: USAID-SIAPS; 2014.
- 3) Lagos AB, Adorio-Arce LP. Training on laboratory information management for NTRL staff. Manila: USAID-SIAPS; 2014.
- 4) Lagos AB. (Draft) Guide for the allocation of Xpert machines (PowerPoint). Manila: USAID-SIAPS; 2013.
- 5) Lagos AB. Draft diagnostic algorithm for Xpert use in smear negative TB (PowerPoint). Manila: USAID-SIAPS; 2013.
- 6) National TB Control Program. Revised Manual of Procedures. Manila: Department of Health; 2014.
- 7) Department of Health. Administrative order no. 2014-0032: guidelines for the scaling up and use of Xpert MTB/RIF as rapid TB diagnostic tool under the NTP. Manila: Department of Health; 2014.
- 8) Adorio-Arce LP. Strengthening NTRL monitoring and evaluation capacity (PowerPoint). Manila: USAID-SIAPS; 2014.
- 9) Lagos AB, Adorio-Arce LP. Training on laboratory network monitoring. Manila: USAID-SIAPS; 2015.
- 10) Lagos AB, Adorio-Arce LP. Laboratory network monitoring guide. Manila: USAID-SIAPS; 2015.
- 11) Lagos AB, Adorio-Arce LP, Castro RV, et al. A brief guide for the decentralization of NTP laboratory training in the Philippines. Manila: USAID-SIAPS; 2017.
- 12) Castro RV, De Ocampo AJ, Gargantiel PZ, et al. Enhanced DSSM training course for implementers (5 parts). Manila: National TB Reference Laboratory and USAID-SIAPS; 2017.
- 13) Castro RV, De Ocampo AJ, Gargantiel PZ, et al. Xpert MTB/RIF training of trainers training guide. Manila: National TB Reference Laboratory and USAID-SIAPS; 2017.
- 14) Lagos AB, Adorio-Arce LP, Bayot ML. NTP laboratory network assessment: strategic directions to improve access and quality of TB diagnostic services (assessment report). Manila: USAID-SIAPS; 2017.
- 15) Lagos AB, Adorio-Arce LP. 2017 Regional planning workshop for laboratory network strengthening: expansion of rapid TB diagnostic laboratories and strengthening EQA-DSSM implementation (workshop report). Manila: USAID-SIAPS; 2017.
- 16) Lagos AB, Adorio-Arce LP. A Guide for the establishment of a Barangay Health Management Council. Manila: USAID-SIAPS; 2016.
- 17) Lagos AB, Adorio-Arce LP. Improving TB Systems and Services through Stronger Community Health Leadership, Management, and Governance in the Philippines (case study). In *Toward Building Resilient Pharmaceutical Systems: Results from a Global Call for Evidence of Sustained Improvements*. Arlington, VA: Pharmaceuticals and Health Technologies Group, Management Sciences for Health; 2018. Available from: www.pharmasystems.org.