Increasing access to TB diagnostics: supplementing laboratory capacity at the local level and scaling up active case finding.

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January 18, 2024



Medecins Sans Frontieres (Doctors without Borders)

- International, independent, medical humanitarian association.
- Impartiality, Neutrality and Independence
- Medical assistance to people affected by conflict, epidemics, disasters, or exclusion from healthcare, neglected diseases (>80 countries).
- Clinical trials and operational research supported by epidemiological team (Epicentre Paris) study design, abstract publication (UNION).
- Patient centered care.
- Collaborative advocacy to influence policy change.

General objective of Tondo TB project

Strengthen the diagnosis and treatment of people with TB in Tondo Districts 1 and 2, Manila in accordance with the Global Plan to End TB by 2030 using the strategy of SCREENING, DIAGNOSIS, LINKAGE TO CARE and PREVENTION.









SCREENING

Increasing free accessibility to screening modalities

Use of mobile
Xray with AI for
real time
results and
management
of patients

DIAGNOSIS

Increasing free accessibility to diagnostic testing to the community

TREATMENT, LINKAGE to CARE and PREVENTION

Ensuring that all patients receive free TB treatment via linkage to the nearest health center



- Weekly activities in eight health centers of Tondo 1, reaching:
- individuals aged 15 and above from general population
- Household contacts (HHC), including a focus on aged 5-14









• Use of CAD4TB (Computer-aided diagnosis for TB) for real-time CXRray reading and results augmenting patient management.





 On-site sputum collection for patients presumptive of TB to both symptoms screening and CXRay thru CAD.



Project

Milestones Donation of one – 4 module and one - 16 module GeneXpert machines to the Local Government Unit (LGU) laboratory to increase testing capacity.





• TB diagnosis via GeneXpert machines donated by MSF with dedicated MSF Lab Technician − decreased Turn-Around Time (TAT) of results to only 3 days → shortened duration for sputum testing to results generation and distribution

Project Milestones



• Contact Tracing (CT) and Contact Investigation (CI) activities conducted to all diagnosed patients from Active Case Finding (ACF) activity – household contacts are invited to ACF for screening.



Key Achievements

ACTIVITIES (May 2022 – December 2023)		
Finding	 19,089 patients people screened 18,244 from general population 845 household contacts 	
	208 ACF days	
Testing	6,744 GeneXpert test done – 98% collection rate	
	4.7% MTB GeneXpert detected among screened Turn-around time (TAT): 6 days to 3 days* Error rate: 2% to 0.3%	



Key Achievements

ACTIVITIES		
Linkage to care	64% treatment initiated	
Prevention	29% Household contact investigation coverage	
	83% acceptance rate for TB Prevention Treatment (TPT) 50% completed TPT (May 2022 – September 2023)	

Amplify impact by:

Establishing an inter-stakeholder collaborations towards community engagement Raising TB awareness through health promotion and community engagement activities









Achievements

- Increased number of ACF participants: From average 50/day in 2022 to 111/day in 2023.
 - Community residents are highly motivated to participate in ACF due to availability of free access to the services, the proximity of the activity, quick results distribution and on-site patient evaluation.
- CAD4TB implementation: Current median TAT for screening is
 23 mins. compared to 47 mins. prior to CAD.
- Decreased TAT from sputum collection to release of results (6 days in 2022 vs 2 days in 2023).



CHALLENGES	PLANS
Low uptake on repeat Xpert test (Trace or Indeterminate results)	MSF nurses to do household sputum recollection. Capacitate barangay health workers.
Patients refuse treatment due to possible socioeconomic cost	Link patients and family to social welfare/ protection services and patient support groups.
Shortage of DSTB drugs	With partners, plan and forecast TB commodities to supplement case finding activities.
 Multiple steps and barriers to TPT initiation and completion Shortage of Purified Protein Derivative (PPD) for TST 	 proposed simplified pathway, without TST for all household contacts under 15 y, with shorter regimens and adapted formulations In addition to forecasting, advocacy of an ordinance for population-specific TST exemption in Tondo.



2nd 4th 2rd 6th

5th

1st

2024 Plans – Sustainability and Replicability – Project Level

- Continue ACF in Dist. 1 and Dist. 2.
 - 142 ACF days in 2024; 140 patients per ACF = Total of 19,880 screened.
- Commencement of household sputum recollection to increase uptake of repeat testing.
- Involve the barangay in the service delivery of the health center to the community.
- Increase community engagement and support TB related advocacies through the formation of a TB committee led by the community.





Sustainability and Replicability – Recommendations for National Level

- MSF Project Outcome level at DOH and National TB Program (NTP): 5 years of data and its analysis, experience and recommendations
- CAD Study outcome level at NTP for advocacy of using AI in TB screening in the community as a national ordinance
- Advocacy on investing more on diagnostics:
 (Gene Xpert machine, cartridges, dedicated Lab Techs) to decrease TAT from sputum testing to results distribution and delivery





Sustainability and Replicability – Recommendations for National Level

- Advocacy on investing for additional installation and improvement of laboratory infrastructures: increase testing capacity and decrease TAT of testing to results generation and distribution
- Replicate capacity building for Barangay Health Workers (BHW) investment on additional manpower and trainings: community ownership of TB related activities (CI, CT, household sputum recollection)
- Sharing of the experience and the approved ordinance in the creation of the TB committee to support TB activities in the communities from both the national health sectors and local government units



THANK YOU

