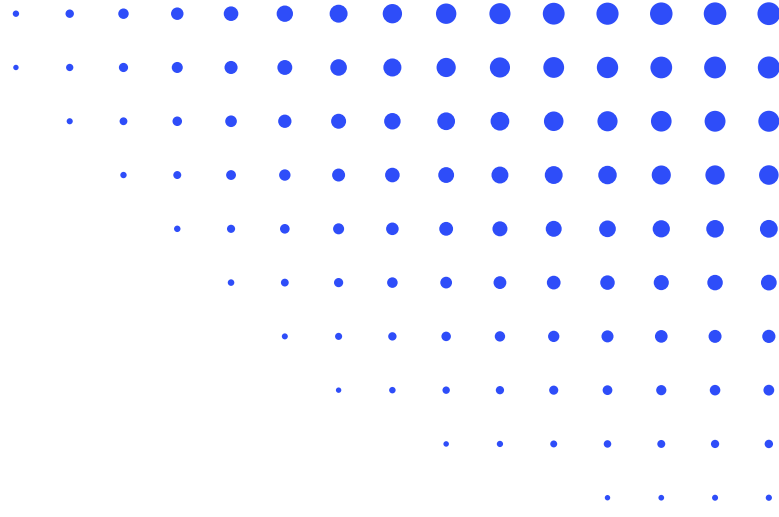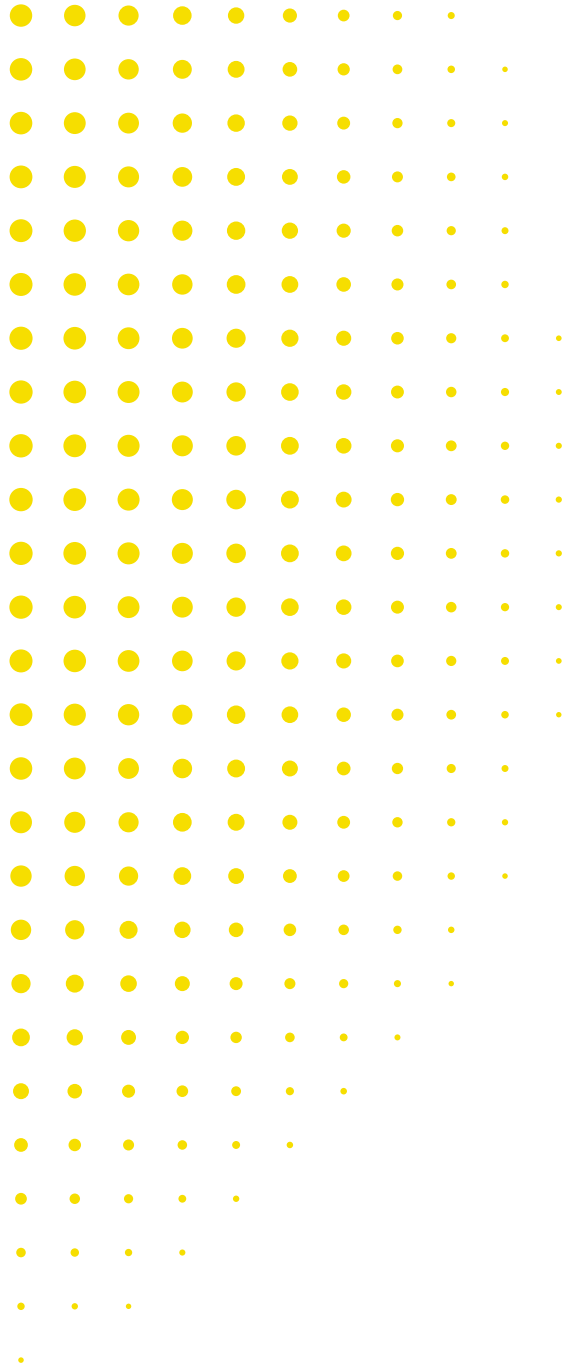The Global Fund/Nichole Sobecki/Panos

The TB Quarterly Update

Innovative Approaches to Finding and Treating Missing People with TB

OCTOBER 2022

THE GLOBAL FUND

Contents

1. What's New

Enhancing Critical Investments in Community Engagement for TB Response

On 19 October 2022, the Stop TB Partnership announced that 100 organizations will receive funding under its Challenge Facility for Civil Society (CFCS) Round 11 for affected community-led actions, advocacy and accountability in TB. With additional funding from the Global Fund and USAID, a historic US$10.5 million is now committed for these organizations—which include 29 countries and 7 regions—to mobilize and ensure affected community voices are represented; strengthen advocacy efforts for resource mobilization and increased domestic financing for TB; increase demand for essential TB services; end TB stigma and break down community, rights and gender (CRG) barriers; and find, reach and engage missing people with TB. For more information on this unique initiative, please click here.

Updated Guidelines from WHO

WHO announces updates on its guidance on tuberculosis care and support

Updated guidelines and a new operational handbook on TB care and support have been launched by the World Health Organization (WHO) to improve the quality of life and better outcomes for people with TB. This includes, for the first time, implementation guidance on health education, counseling and palliative care as well as social support, treatment administration options and digital adherence technologies. The _WHO Consolidated Guidelines on Tuberculosis, Module 4: Treatment - Tuberculosis Care and Support_ includes all current WHO recommendations on care and support for people with TB, aiming to inform health care professionals in Member States on how to improve the outcomes and quality of life of people receiving TB treatment.

The guidelines are complemented by a new _WHO Operational Handbook on Tuberculosis, Module 4: Treatment - Tuberculosis Care and Support_

designed to assist the implementation of WHO recommendations by Member States, technical partners and others involved in providing care for people with TB. The WHO Operational Handbook provides practical guidance on how to put in place the recommended treatment options at the scale needed to achieve national and global impact and emphasizes the interventions recommended to improve TB treatment outcomes. This encompasses guidance on the implementation of interventions that enable treatment adherence including through social support, treatment administration options and digital adherence technologies. Importantly, for the first time in WHO operational guidance, two chapters are included on health education and counselling and palliative care.

The updated guidelines and supporting operational handbook are designed for use by national TB programs, or their equivalents in Ministries of Health, policy makers and technical organizations working on TB and infectious diseases in public and private sectors and in the community. These documents aim to facilitate uptake of WHO policy in the field and thus improve the overall quality of TB services. To find out more, click here.
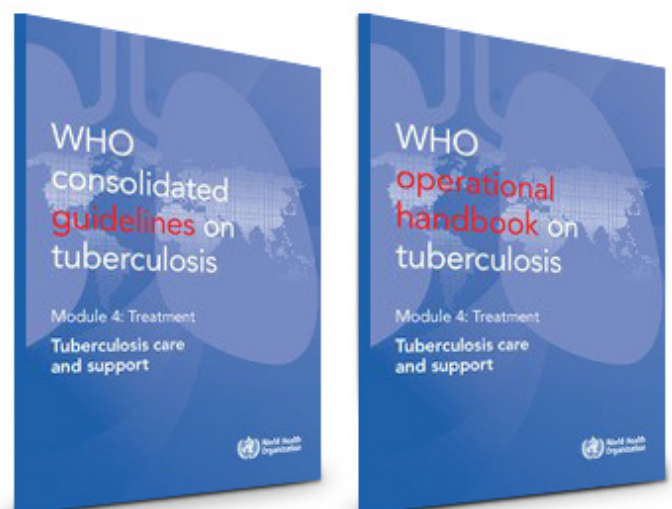
National TB Strategic Plan Guidance from WHO

WHO recently released guidance to support national strategic planning for the TB response. The guidance encourages the use of a people-centric focus in the development of national TB strategic plans (NSPs). It highlights the importance of government stewardship and ownership, promotes alignment with national health strategy and other health programs and emphasizes multi-stakeholder and multi-sectoral engagement as one of the key steps for multi-sectoral accountability for TB. The guidance is intended for use in developing standalone TB strategic plans, or in developing TB interventions as part of multi-disease or national health sector plans. It describes good practices and steps for developing a TB NSP in line with WHO's End TB Strategy, along with the proposed structure and components.

TB Prevention Update from WHO
Monitoring TB screening and TB preventive treatment

One-quarter of the world's population is estimated to have been infected with TB bacilli. Programmatic implementation of TB preventive treatment (TPT) is critical to protect the infected individual from developing TB. This is one of the key components of WHO's End TB Strategy. Scaling up TPT provision to people at risk, such as contacts of TB patients and people with HIV, should also be linked with active efforts to find people with TB whose diagnosis may otherwise be delayed or missed. Integrated action for TB screening and TPT is thus recommended by WHO. Systematic monitoring at critical points of the cascade of TB care should also include TB screening and TPT but remains weak.

From 2017, the Global TB Programme of WHO, with support from the European Respiratory Society, facilitated the development of a digital platform to strengthen recording and reporting of the cascade of care for TB screening and TPT. This system is meant to provide national programs with a prototype of the data to be collected for preventive TB care. The system has since evolved to the current version of the Prevent TB platform. It includes a comprehensive set of tools for users to adapt data management to their local needs.

A demonstration version of the Prevent TB platform is available here. This illustrates the three modules that compose the platform, namely:

1. Smart configuration module: This allows implementers to design their own data collection tool using either mobile devices or desktop computers, develop dashboards for local program needs, being flexible to allow changes as the program needs evolve. The module provides data collection form builder, workflow configuration, business rule configuration, user management and roles, facility mapping and many more useful features. One key attribute of this module is the language translation feature. While the platform comes with six languages (Arabic, English, French, Chinese, Russian, Spanish), it can also support the addition of other local languages.

2. Prevent TB application: Both mobile (iOS and Android) and desktop versions of the application are available. The apps work both online and offline for registration of clients and data entry through the continuum of care. It allows capture and monitoring of TB clients through the continuum of TB care including registration, screening, testing for TB disease and TB infection, TPT start and adherence and TPT completion. The generic demo version incorporates key data variables aligned with the latest WHO guidelines on TB screening and TPT.

3. Prevent TB dashboard: The dashboard offers a quick visual representation of key monitoring indicators across the cascade of care. Data aggregations are provided for some key groups, along with maps and other graphics. It also provides a comprehensive line-listing of people monitored through the platform as well as mapping of contacts of TB patients with respective index TB patients.

Scale-up and implementation of the open-source platform has been supported through the Global Fund Strategic Initiative 'Finding Missing People with TB' and TB Prevention and rolled out in India, Mozambique, Pakistan, the Philippines and Timor-Leste with ongoing efforts for programmatic adaptation in the United Republic of Tanzania, Zambia and Zimbabwe. For more details on the implementation of Prevent TB please contact kanchara@who.int.
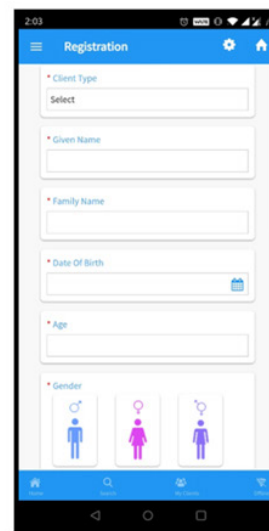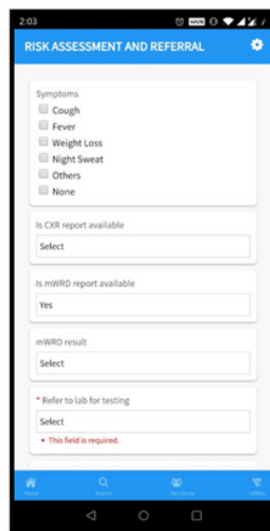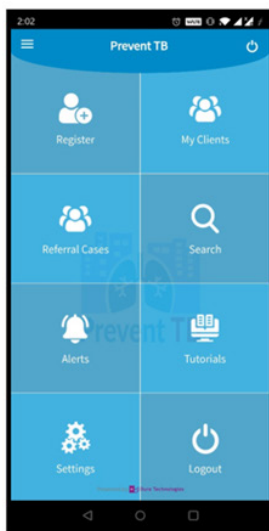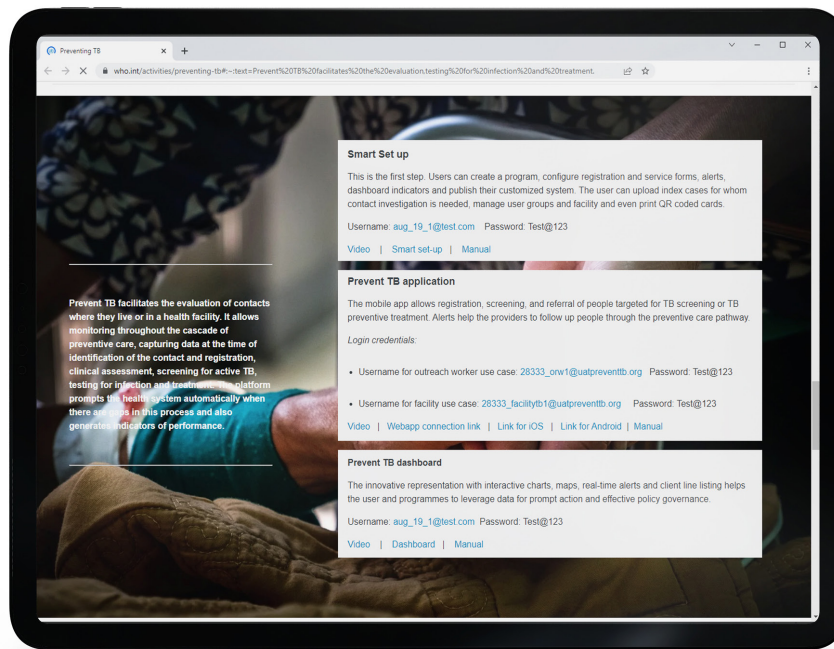
Connection details for Demo version

Smart setup

- **Connection link:** https://ltbigen.duredemos.com/smartsetup/
- **Username:** aug_19_1@test.com
- **Password:** Test@123

Applications (Desktop and mobile apps)

- **Webapp connection link:** https://ltbigen.duredemos.com/product/
- **Mobile Application connection link:**
  o **Link for iOS:** https://apps.apple.com/in/app/tpt/id1500222351
  o **Link for Android:** https://play.google.com/store/apps/details?id=com. duretechnologies.apps.android.ltbigt
- **QR code to access both iOS and Android app**
- **Login credentials for all above (two use cases, outreach worker and health facility)**
  o **Username for outreach worker use case:** 28333_orw1@uatpreventtb.org
  o **Password:** Test@123
  o **Username for facility use case:** 28333_facilitytb1@uatpreventtb.org
  o **Password:** Test@123
  o **Pin No:** 1234

Dashboard

- **Connection link:** https://ltbigen.duredemos.com/ltbi-generic-new/
- **Username:** aug_19_1@test.com
- **Password:** Test@123

iNTP Update from Stop TB Partnership and USAID
Stop TB Partnership and USAID introduce New Tools Project (iNTP)

The iNTP is introducing new diagnostic and digital health innovations in 11 high TB burden countries to:

- Demonstrate feasibility of using these tools and guide wider scale-up

- Increase access to testing, treatment and prevention of TB and drug-resistant TB including in peripheral settings and for hard-to-reach populations
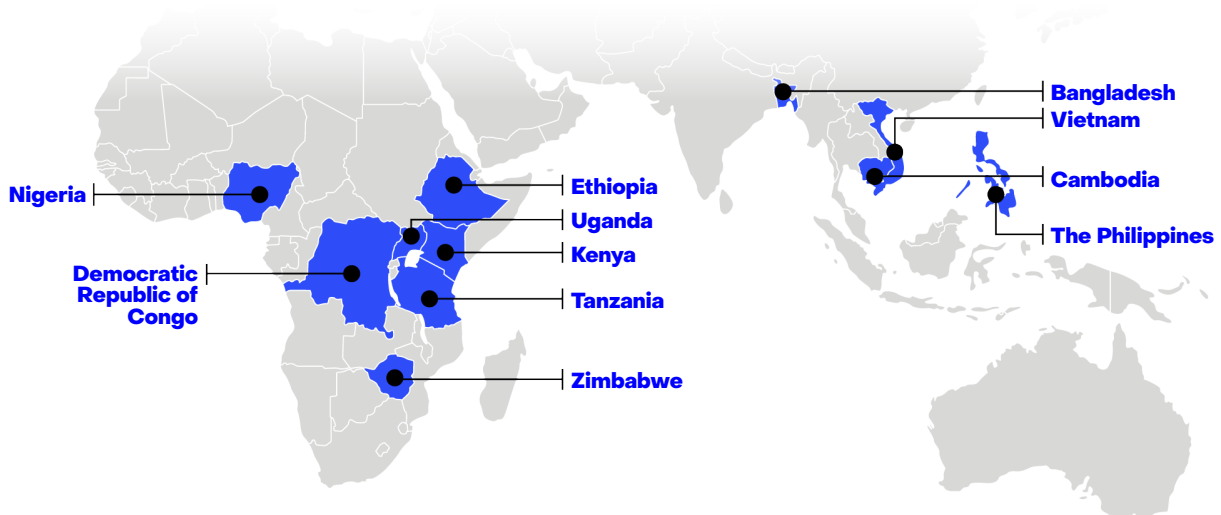
Truenat

Bangladesh, Cambodia, DRC, Kenya, Nigeria, Philippines, Uganda, Vietnam, Zimbabwe

- 15-38 Molbio Truenat systems with reagents in each country + comprehensive warranties
- Testing started in November 2021-August 2022; reagents until May 2023
- Stop TB/USAID/GLI Practical Guidance and Training Modules support implementation
- Webinar for global stakeholders and Nigeria case study on early experience

Ultra-portable X-ray and CAD

Bangladesh, DRC, Kenya, Nigeria, Philippines, Uganda, Vietnam

- 5-14 Fujifilm Xair or Delft Light ultra-portable digital X-ray systems with computer-aided TB detection (CAD) software in each country
- Some countries are using ultra-portable X-ray together with Truenat
- Stop TB/USAID Practical Guidance, Training Modules and experience-sharing webinars

Sequencing

Bangladesh

- Targeted next-generation sequencing is underway at icddr,b under research conditions using Illumina MiniSeq instrument with Genoscreen Deeplex Myc-TB assay

- Data have been provided to WHO as part of evidence base for Q4 2022 guideline development on use of sequencing for guiding treatment of drug-resistant TB

Digital health technologies

Bangladesh, DRC, Ethiopia, Kenya, Nigeria, Philippines, Tanzania, Uganda

- Diagnostics connectivity solutions are being developed or strengthened in 5 countries for connection of networks of Truenats and other rapid molecular tests
- Treatment adherence technologies using medication sleeves or video-observed therapy using Everwell solutions or are being developed in 5 countries

TB infection: test and treat

Bangladesh, DRC, Kenya, Nigeria, Philippines, Vietnam

- QIAGEN QFT-Plus IGRAs have been introduced in 3 countries to test for TB infection
- TB preventive therapy using the 3HR regimen has been provided to 6 countries including with a focus on household contacts, a target group that until now has largely been untreated in most countries

For more info, visit: https://www.stoptb.org/ accelerate-tb-innovations/introducing-new-tools-project

Country-level Technical Assistance

1. CAMEROON
Addressing TB and COVID-19 and TB in key populations

The COVID-19 pandemic has had a significant impact on TB notification in Cameroon, with a 10% decrease of cases notified (DS and DR TB) in 2020 compared to 2019. Despite little improvement of TB notification in 2021 (an increase of 2%), COVID-19 remains a serious issue—both because of its morbidity and the stigmatization around TB and COVID-19 for people attending health care facilities. To address these challenges, the country will develop bidirectional TB/COVID-19 algorithms and SOPs so that health workers are trained for active case finding of both diseases. The country's TB specimen transportation system, which is in its early stages and supports all three diseases (TB, HIV and COVID-19), will also be evaluated and new sample transport alternatives and local transport networks will be proposed. In addition, technical assistance will support guideline and strategy development, including revisions to the National Laboratory Guide for TB and the development of a national strategy for TB prevention and treatment among vulnerable populations.

2. MONGOLIA
Improving TB case detection

Based on newly available data, TB incidence in Mongolia is estimated to be 428 per 100,000 population (uncertainty range: 220-703 per 100,000 population), ranking tenth among the countries with the highest TB incidence in the world. The country had an estimated 14,000 incident TB cases in 2021, of which only a third (20%; 2709 patients) were diagnosed and treated, leaving a significant proportion (80%) of people with TB undiagnosed or unreported. With the support of the Global Fund TB Strategic Initiative, several portable X-ray and Xpert MTB/RIF machines are being used and active case finding activities are being conducted, but treatment coverage has not improved significantly. Therefore, the country aims to review ongoing activities, identify the most effective strategy in terms of TB case finding and develop recommendations to inform priorities for future programming.

2. Knowledge Sharing and Learning Resources

CASE STUDY: Quick Recovery and Catch up in TB and DR-TB Notification in Vietnam after COVID-19

Background

In early 2021, TB and DR-TB notification in Vietnam dropped significantly due to COVID-19. In order to improve active case finding (ACF) and testing, especially among high-risk groups, the country implemented the innovative "Double X" strategy, which involves using chest X-Ray (CXR) and Xpert MTB/RIF to diagnose TB.

Implementation

As a first step, the National TB Program (NTP) conducted ACF mapping and scoring of priority factors to allocate funds and re-programmed activities as required. The 2X approach was expanded throughout the entire country (urban and rural, public/private and community levels) in January 2022, with implementation of 1X at several treatment facilities from February 2022. This first phase focused on populations in high TB burden provinces, among high-risk groups, workers, cross-border migrants, including through ACF/community engagement and private sector engagement (through the PPM-5 model). The lab network and diagnostics (QuantiFERON-TB

Gold, LAMP, GeneXpert, LPA 1-2, DST 1-2) were also enhanced at all levels of service. GeneXpert technology was scaled up, with 231 machines at 155 sites and 98 new GeneXpert machines added later. The GxAlert connectivity system was used in all GeneXpert sites.

ACF was strengthened in 10 provinces among populations with high TB burden, among high-risk groups, in five provinces among workers and in two provinces among cross-border migrants. ACF and intensified TB detection under C19RM was done in 19 provinces, enhancing the PPM model-5 in 10 provinces and improving ACF by sub-recipients (SRs) in 29 provinces.

Results

In the first six months of 2022, the DS-TB case notification was 48,120—nearly meeting the target of 50,000 cases. It was also approximately 2% more than the first six months of 2020 (47,210), approximately 1% more than the first six months of 2021 (47,736) and almost at the first six months of 2019 (pre-COVID-19, 50,744 cases). Case detection increased significantly in Q2/2022: to 20.8% vs Q2/2021 and to 4% vs Q2/2019 (pre-COVID-19).

Table 1:	Q1 and Q2 DS–TB case detection from 1 January 2019 to 30 June 2022
Figure 1:	Quarterly trend of DS–TB case detection from 1 January 2019 to 30 June 2022

Source: NTP quarterly report. Vietnam TB Information Management Electronic (VITIMES).

YEAR	Q1	Q2	6 months
2019	24,170	26,574	50,744
2020	24,159	23,051	47,210
2021	24,863	22,873	47,736
2022	20,483	27,637	48,120
2022 vs 2019	*– 15.3%*	*+ 4.0%*	*– 5.2%*
2022 vs 2021	*– 17.6%*	*+ 20.8%*	*+ 0.8%*
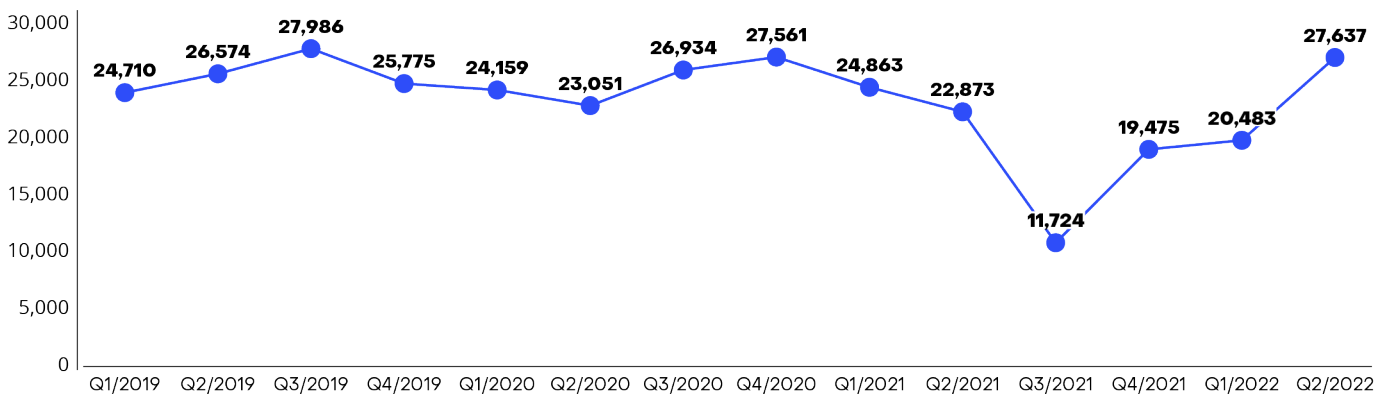
Similarly, for drug-resistant/rifampicin-resistant TB (DR-TB/RR-TB), case finding for the first six months of 2022 was 1,665—an increase of 9.5% vs the first six months of 2021 and a 17.5% increase vs the first six months of 2019. Particularly, the second quarter of 2022 it increased by 37.7% vs Q2/2021 and by 27.8% vs Q2/2019 (pre-COVID-19).

Table 2: Q1 and Q2 drug–resistant/rifampicin–resistant TB case notification

Figure 2: Trend of MDR/RR case detected from 01/01/2019 to 30/06/2022, by Quarter

Source: NTP quarterly report. Vietnam TB Information Management Electronic (VITIMES).

YEAR	Q1	Q2	6 months
2019	611	806	1,417
2020	786	819	1,605
2021	772	748	1,520
2022	635	1,030	1,665
2022 vs 2019	*+ 3.9%*	*+ 27.8%*	*+ 17.5%*
2022 vs 2021	*– 17.7%*	*+ 37.7%*	*+ 9.5%*
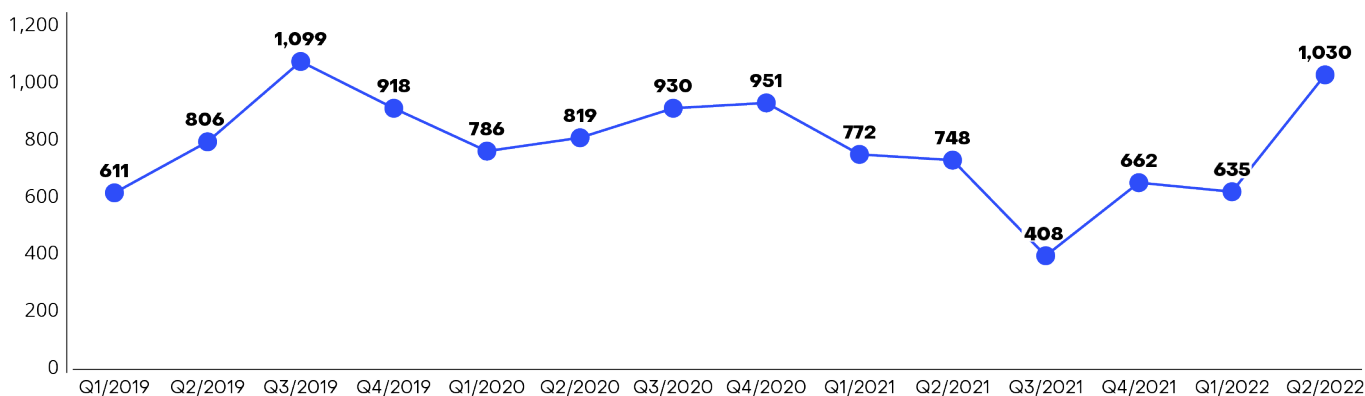
These results reflect a number of noteworthy innovations. Catch-up plans were developed and implemented. ACF and intensified case-finding (ICF) began earlier and was more robust than in the pre-COVID-19 period. In addition, commitment at all levels was reviewed and reinforced, while engagement of partners and stakeholders was stronger. Moreover, rapid technical support from the Global Fund Country Team was provided to the TB team implementing and monitoring activities.

Lessons learned and next steps

The country will:
- Strengthen latent tuberculosis infection (LTBI) management.
- Leverage additional resources and sequencing for DR/XDR TB GeneXpert diagnostics.
- Automatize information flow among LIS, HIS and the VITIMES (being supported through the GF-funded TA, provided by Zenysis).
- Allocate funding for maintenance of lab equipment (GeneXpert, LPA, MGIT, BACTEC, etc.).
- Develop and maintain a refresher training for new and existing staff.

Active case finding in Yen Bai Province, Hai Phong City, and Hung Yen Province

Source: The National TB Program

UPDATE: Compendium of Best Practices in Tuberculosis Case Finding in Nigeria 2018-2021

Nigeria is the most populous country in Africa, with a projected population of about 206 million. Nigeria has the highest burden of TB on the African content and ranks sixth among the 30 highest TB burden countries globally.

In 2018, the country's National Tuberculosis, Leprosy and Buruli Ulcer Programme (NTBLCP) was selected as the public sector Principal Recipient of the Global Fund's grant for the funding year 2019-2020, which culminated in the strategic development of different approaches to TB programming. Since 2019, the country has recorded a significant and consistent increase in annual TB notification and Nigeria was among the very few countries that recorded an increase in TB notification in 2020 at the height of the COVID-19 lockdown. TB notification increased by:

- 13% from 106,533 TB cases in 2018 to 120,266 TB cases in 2019
- 15% from 120,266 in 2019 to 138,591 TB cases in 2020
- 50% from 138,591 in 2020 to 207,785 TB cases in 2021

The programme has implemented a number of activities to improved case notification and has identified the following best practices:

- Strategic engagement of the private sector to increase TB case finding (increase in case notification in PPM from 10% in 2019 to 28% in 2021).
- Community engagement and involvement to drive TB case detection (increase in community TB contribution from 19% in 2018 to 33% in 2021).
- Intensification of TB case finding in health facilities through systematic and routine screening of OPD attendees for TB.
- Active TB case finding among key populations (PLHIV, nomadic populations).
- Active TB case finding among children and adolescents.
- TB integration into COVID-19 response to find missing TB cases.
- Addressing gender-related barriers to TB case finding (e.g., through women groups, use of female health workers).
- Scaling up of TB treatment services towards achieving the UHC target (DOTS expansion from 4,387 in 2011 to 17,699 2020).

Recently, the NTBLCP launched a compendium of best practices in TB case finding. This compendium highlights these and other best practices, with a focus on illuminating the strategies that have made the greatest impact in each intervention. Read more about Nigeria's innovative TB best practices here.

Figure 3: National trend in TB case notification 1999–2021

Source: The National Tuberculosis, Leprosy and Buruli Ulcer Programme (NTBLCP)
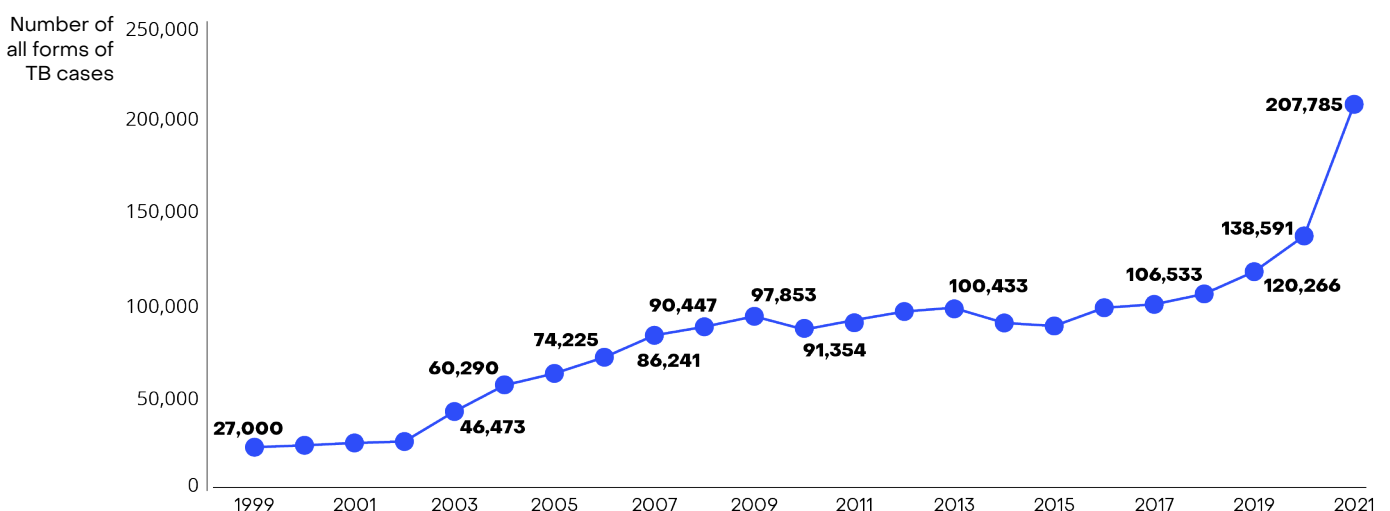
3. Other Updates

TB Preventive Treatment (TPT) Strategic Initiative Update from the Global Fund

The TPT for People Living with HIV (PLHIV) with a Family Approach Strategic Initiative started in 2020. TPT is a high impact intervention critical to reducing the burden of TB and achievement of the global targets for HIV and TB. Despite clear recommendations from WHO, the uptake of TPT has been slow. The United Nations High Level Meeting (UNHLM) Political Declaration on TB contains a number of ambitious targets for TB prevention for those most at risk of falling ill, including rapid scale-up of access to testing and provision of TPT for at least 30 million people by 2022, of which 6 million are PLHIV and 4 million are children aged under 5 years who are household contacts of people affected by TB. By 2020, 7.1 million PLHIV have received TPT but gaps still remain in many countries.

The TPT for PLHIV with a Family Approach Strategic Initiative provides high quality technical assistance to catalyze change and support the implementation of TPT activities in the grant. The main objectives of the strategic initiative are to: 1) accelerate achievement of high coverage of TPT among all PLHIV cohorts (excluding those with active TB) and 2) scale TPT in children under 5 who are contacts of TB/HIV patients.

This strategic initiative has two components: the global/regional and the country component. The global/regional component is implemented by WHO while the country component is implemented by consultants (independent or organizations) with support from WHO. Countries decide what kind of technical assistance they want based on their needs. Nine countries were originally selected to be part of the TPT SI: Malawi, Tanzania, Zimbabwe, Lesotho, Eswatini, Ethiopia, Zambia, Nigeria and Mozambique. The first five countries are also receiving matching funds. As of August 2022, seven of the nine countries have already started receiving the requested technical assistance. Six additional counties (Liberia, Guinea-Bissau, Thailand, Botswana, Niger and Dominican Republic) have been recently added to the SI and will be receiving TA soon.

Community Engagement (CE) Strategic Initiative Update

In the current cycle, the Community Engagement Strategic Initiative (CE SI) has increased its focus on generating TB-related TA demand in collaboration with the CRG Regional Platforms and TB Regional Networks.

Since the beginning of 2022, the CE SI and CE SI partners have held two TA information webinars for TB communities from Anglophone and Francophone Africa, Asia Pacific, Eastern Europe and Central Asia (EECA), as well as Latin America and the Caribbean (LAC). Following the webinars, CRG Regional Platforms provided support to TB community groups in developing and submitting quality TA requests.

Some examples of the TA provided by the CE SI include:

- Facilitating meaningful engagement of TB communities in CRG assessments and costed action plan development in Benin, Zimbabwe and upcoming in Lesotho.
- Partnering with the TB SI to support a team of M&E, costing and CLM experts to develop a multisectoral TB CRG M&E Framework, including a CLM framework for TB programs in Tanzania.
- Developing a TB CRG training curriculum as part of strengthening the capacity of TB communities to engage in costed action planning in Zimbabwe. The training could be replicated in other settings to support TB community engagement in CRG assessment and action plan development.

Long-term support to CRG TB regional networks (as of June 2022) has yielded several positive outcomes, including the development and translation of a TB advocacy tool to enable communities to influence TB programming in Francophone countries (ACT Africa/TB Proof), development of a rights-based TB Isolation Policy (Nigeria), implementation of TB community-led action research to assess the catastrophic costs of drug-resistant TB patients (Indonesia) and successfully lobbying by national CSO partners for adoption of a standardized package of community-based TB services (Kyrgyzstan).

Investments in CRG regional platforms, which provide strategic communication and coordination support to TB communities, have also fostered meaningful engagement. A regional webinar was convened by the LAC platform to share engagement experiences in the funding request process for the 2020-2022 cycle of grants; while small sub-grants were provided to seven regional key population networks through the EECA regional platform to strengthen engagement in Global Fund processes. In the Middle East and North Africa (MENA) region, the MENA Network to Stop TB was supported to conduct a mapping of TB actors and services in the region. The mapping will be used to assess community engagement in the fight against TB and to detect opportunities for collaboration with key stakeholders.
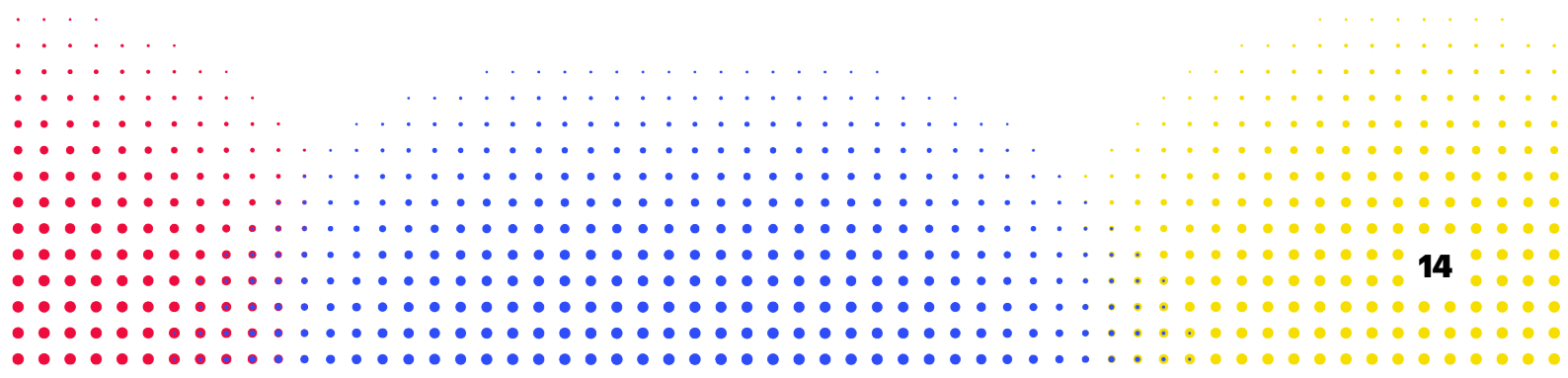
4. Voices

Meera Yadav, TB Survivor and Advocate—On Transforming Fear into Purpose

Meera Yadav fiercely advocates for better access to TB diagnosis, care and treatment after a long and painful journey fighting the disease. Now TB free, she is determined to use her personal struggles to help find lasting solutions.

In 2013, after seeking care for a persistent cough and fever at a local clinic in Mumbai, India, Meera Yadav was diagnosed with MDR-TB.

She immediately was taken to a hospital whose staff were not adequately trained to deal with TB patients. *"I was practically dumped in a corner,"* she recalls. *"I could spend up to three days without being visited by a doctor."*

For the first nine months of her treatment, Meera didn't see any improvement.

Eventually, she was transferred to another hospital where she slowly saw signs of progress until another setback arose. Near the end of her 19-month treatment, she noticed blood in her cough droplets. Further tests revealed that Meera's right lung had collapsed and her MDR-TB had progressed to XDR-TB—the hardest to treat form of the disease.

The strain of the illness and repeated treatment failures was exacerbated by a lack of social support. Meera experienced stigma from many of her family members—including her husband, who forced her to leave their family home and her son.

"It was a very dark time," she says.

She remembers feeling angry and hopeless. It seemed the treatment had failed.

She didn't know where to turn.

> *I have seen the last frontier of this disease.*

It was around that time that a counselor suggested that Meera seek help from a clinic with expertise in treating XDR-TB. The treatment and care she received at the clinic, which included psychosocial counselling and adherence support, motivated her to continue and helped her regain hope. After having her lung surgically removed and receiving two life-saving drugs—bedaquiline and delamanid—Meera finally defeated the disease.

On the importance of the psychosocial support that she received at this particular clinic, Meera says, *"Had I not gotten that support, I am not sure if I would have continued treatment or gained full treatment success and been here to talk to you."*

Through her recovery, Meera says she became more informed about TB prevention and treatment. She also emerged from her struggle with a clear purpose: to become a beacon of hope and a voice for change. She joined the Global Coalition of TB Advocates (GCTA), a Global Fund partner whom she credits as the key to her learning, and she started educating people about TB and sharing her experiences.

Today, Meera remains focused on shining a light on the work that's left to do. This includes advocating for timely TB diagnosis, an end to stigma and discrimination and enhanced TB community engagement. As someone with only one lung who describes herself as *"living in the shadow of fear"* of TB and other respiratory illnesses like COVID-19, her commitment to these issues—and a world free from TB—is where she draws much of her strength now.

"I have had the chance to be an advocate, and that motivation is a support in itself. The motivation to ensure that nobody else has to go through the pain that I have been through. The motivation to ensure that people around me who are suffering with the same disease that I have suffered with have the support that they need."

The Global Fund/Jonas Gratzer

About the TB Strategic Initiative
The **TB Strategic Initiative**, funded by the Global Fund and implemented by the Stop TB Partnership (Stop TB) and the World Health Organization (WHO), has been working with national TB programs and partners since 2018 to stop the spread of TB and reach the global goal adopted by world leaders to end TB by 2030. This ambitious joint effort, initially launched in 13 countries, aims to address specific barriers to finding missing people with TB, especially among key vulnerable populations, through a combination of innovative approaches, knowledge-sharing and best practices. Now in its second phase (2021-2023), the TB Strategic Initiative will catalyze further efforts to find and successfully treat people with TB facing barriers and that are currently missed at different points in the TB care cascade in 20 priority countries.

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