Southern Region Training of Trainers (ToT)

Advocating for Equitable Access to Molecular Point-of-Care Diagnostics for HIV, TB and Related Infections

29–30 January 2026

Saravana's Golden Fruits Business Suites, Chennai

Background and Program Context

India's national response to HIV and tuberculosis (TB), led by the National AIDS Control Programme (NACP) and the National TB Elimination Programme (NTEP), has achieved substantial gains in treatment coverage, mortality reduction, and service expansion. However, persistent challenges remain in early diagnosis, decentralised testing, integration of HIV–TB services, and continuity of care, particularly for people living with HIV (PLHIV), key populations, and communities in hard-to-reach and high-burden districts.

Delayed diagnosis continues to contribute to late treatment initiation, preventable morbidity, ongoing transmission, and suboptimal outcomes under both programmes. Evidence from programmatic and community settings indicates that reliance on centralised laboratory-based testing alone is insufficient to meet national and global targets, including the 95–95–95 HIV targets and India's commitment to TB elimination by 2025.

Molecular point-of-care (POC) diagnostics represent a critical programmatic opportunity to strengthen early case detection, enable same-day clinical decision-making, and reduce loss to follow-up across the HIV and TB care cascades. Despite the inclusion of molecular diagnostics within national guidelines, access and operationalisation remain uneven across states and districts.

The Southern Region Training of Trainers (ToT) was organised to strengthen technical understanding, advocacy capacity, and regional action planning among community leaders and civil society actors, enabling them to effectively engage with NACO, State AIDS Control Societies (SACS), NTEP structures, and district health authorities to advance equitable access to molecular POC diagnostics.

Objectives of the Training

The overall objective of the ToT was to build a cadre of informed community advocates capable of supporting national and state HIV and TB programmes through evidence-based, rights-oriented advocacy.

Specific objectives included:

Strengthening Understanding

Strengthening participant understanding of HIV and TB epidemiology, national programmatic priorities, and care cascades

Technical Knowledge

Enhancing technical knowledge on WHO-recommended molecular diagnostics for HIV, TB, and related infections

Identifying Gaps

Identifying programmatic and operational gaps in diagnostics affecting PLHIV and key populations

Building Capacity

Building participant capacity in structured advocacy planning, aligned with national programme frameworks

Action Plans

Supporting the development of region-specific advocacy action plans to improve access, integration, and accountability in diagnostic services

Participant Profile

The training convened a diverse group of participants from across Southern India, bringing together representatives of PLHIV networks and community-based organisations, HIV warriors and TB champions, public health activists and civil society groups engaged in TB work, as well as individuals experienced in programme monitoring and community engagement. This rich mix ensured that lived experiences, field-level realities, and advocacy perspectives were meaningfully integrated, strengthening discussions in the context of NACO and NTEP implementation.

Day One: Technical Foundations and Field Realities

Inaugural Session

The workshop opened with the Tamil Thai Vazhthu, sung by the participants and delegates, followed by the ceremonial lighting of the lamp, marking an auspicious beginning to the two-day Training of Trainers programme on Advocating for Equitable Access to Molecular Point-of-Care Diagnostics for HIV, TB and Related Infections

Welcome Address

The welcome address was delivered by Snehalatha A, CEO of INP+, who emphasized that timely and accurate diagnosis is not just a technical requirement, but a critical issue of rights for people living with HIV and those affected by TB. She highlighted the disproportionate impact of diagnostic delays, noting that it is essential to address this issue as India is committed to ending HIV and TB by 2030. Molecular point-of-care (POC) diagnostic methods would transform the lab-centric approach to a patient-centric approach in TB treatment, enabling earlier diagnoses and successful links to treatment. She welcomed all the participants, delegates, and panellists to the two-day training of trainers and appreciated their interest in participating despite their busy schedules and engagements.

Introduction of Participants and Opening Remarks

Introduction of participants, pre-test & expectations

Participants completed a pre-test questionnaire to assess existing knowledge on TB, HIV, and diagnostics. A unique interactive game facilitated participant introductions, fostering early networking and a lively atmosphere among attendees from diverse states.

Opening remarks

Opening remarks were delivered by Blessina Kumar, CEO of GCTA, who placed molecular diagnostics within the broader context of community-led and rights-based advocacy. She emphasised how informed advocacy can influence diagnostic policy, budget prioritisation, and implementation in national and state programs.

Chief Guest and Key Note Addresses

Chief Guest Address

Dr. Kalusivalingam, the Deputy Director of Care Support & Treatment (CST) at TANSACS, in the Chief Guest address, emphasized the Government of Tamil Nadu's commitment to enhancing HIV diagnostic services. He discussed the current diagnostic methods in use and presented several case studies. Dr. Kalusivalingam highlighted the importance of integrating new diagnostic technologies into existing public health systems to improve early detection, facilitate linkage to care, and enhance treatment outcomes.

Key note Address

Dr. Darivianca from Molbio briefly discussed the molecular point-of-care (POC) diagnostic tools developed by Molbio, highlighting their successful implementation in various locations in India and abroad. She emphasized the importance of expanding access to these tools quickly, so more people can be enrolled in treatment services. Additionally, she mentioned that one machine can test for multiple diseases in a very short amount of time. Dr. Dariviance also pointed out how this innovation will enhance the capacity of our National Elimination of Tuberculosis Program (NETP).

Kahoot - HIV 101 & TB 101

Quiz on HIV & TB

The session "HIV 101: Understanding HIV in the Context of Diagnosis, Treatment and Equity" was facilitated by Ms. Rosalynn L. and Ms. Blessina Kumar.

The interactive Kahoot quiz session explored key concepts of HIV and TB, such as transmission routes, immune cell targeting, prevention strategies, causes of TB, vulnerable populations, and the pillars of India's National Strategic Plan. It also addressed diagnostic tools, treatment protocols, and advanced topics like Drug-Resistant TB and Tuberculosis Preventive Therapy. By turning complex material into a dynamic activity, the session boosted engagement, improved understanding, and strengthened knowledge retention.

The participants were asked to scan the QR code to enter the competition, and questions were displayed on the screen for them to answer on their smartphones. Dr. Mahalingam stepped in to translate the questions into Tamil. The winners, Daisy. D, Ramesh A, Poongodi and Mohan received tokens of appreciation for their knowledge.

TB Diagnostics and Research under ICMR-NIRT in India

During the training session, Dr. Priya Rajendran, Scientist at ICMR–NIRT, highlighted the importance of rapid TB diagnosis in breaking the chain of community transmission and initiating timely treatment.

She introduced newly validated indigenous diagnostic technologies—the Quantiplus MTB FAST Detection Kit, an affordable open-system RT-PCR platform compatible with existing machines, and the UniAMP MTB Nucleic Acid Test Card, which, for the first time, enables testing through simple, non-invasive tongue swabs instead of sputum samples, making diagnosis easier for children, HIV positive people and the elderly. Dr. Priya emphasised. For pediatric TB testing using stool and testing using urine among asymptomatic and sputum-less people are developed by NIRT section. that these innovations complement existing platforms like Truenat and PathoDetect, together reducing diagnostic delays and improving outcomes for both drug-sensitive and drug-resistant TB cases, thereby strengthening India's mission to eliminate tuberculosis.

Overview of Current TB and HIV Diagnostics in India

Dr. Mahalingam Periasamy presented a practical, patient-centered perspective on India's diagnostic journey, emphasizing the transition from traditional antibody and smear-based methods to advanced molecular diagnostics. These modern techniques directly detect pathogens instead of relying on the immune response. They enable early intervention before severe illness occurs, support treatment monitoring, facilitate early detection of treatment failure, and ultimately enhance survival rates, quality of life, and long-term outcomes for individuals living with HIV.

His session highlighted that molecular testing, particularly nucleic acid testing (NAT) via PCR, is not just a clinical procedure but a powerful tool for protection and empowerment. It allows individuals to make informed decisions about their health and treatment options. He also discussed early infant diagnosis of HIV, which involves using PCR four times to confirm the status of newborns: at 45 days, 6 months, 12 months, and 18 months.

Synthesis and key takeaway-Blessina Kumar

In her session, Blessina reviewed the terms and abbreviations used in TB and HIV molecular testing for the benefit of the participants. She emphasized that the ultimate goal of the intervention is "Reaching the Unreached." She explained various concepts, including NAAT, DS TB, DR TB, HRZE, and the ATT regimen for MDR TB, XDR TB, and TDR TB, among others.

Introduction to Molbio and POC Diagnostics

Dr. Darivianca E. Laloo emphasized the importance of expanding HIV and hepatitis testing beyond central laboratories, noting the limitations of centralized models, including patient loss due to sample transport delays and long turnaround times, and stressing that global and national elimination goals for HIV, TB, and hepatitis cannot be achieved without decentralization.

She highlighted how Truenat bridges the gap between rapid tests and central labs by providing portable, battery-operated PCR-based testing that delivers results within 1–2 hours, requires no cold-chain for reagents, and integrates multiple tests—including HIV, HBV, HCV, TB, and other infectious diseases—on a single platform. Evidence from Manipur demonstrated near-universal same-day test-and-treat outcomes with Truenat, underscoring its potential to improve linkage to care, reduce loss to follow-up, and strengthen overall program outcomes

Demo of Truenat and AI X-ray

A demonstration highlighted the strengths of Truenat and X-Ray technologies, praised for being "simple, fast, and user-friendly," with Truenat positioned as a true "game changer at the point-of-care."

TrueNAT's key features include portability and decentralization, as it is battery-operated, solar-rechargeable, and robust enough for transport, making it ideal for remote settings. Its versatile test menu currently covers around 50 diagnostics—including HIV viral load, STIs, Hepatitis B/C, and lung conditions—with plans to expand to 64 pathogens for antimicrobial resistance detection in under an hour. Designed for simplicity, it can be operated by staff with limited specialized training after appropriate instruction.

In community healthcare, TrueNAT offers significant advantages: rapid and accurate diagnosis that eliminates the 3–4 week delays of traditional molecular testing; improved early detection that enables timely treatment, prevents disease progression, and reduces transmission; enhanced accessibility by bringing diagnostics directly to underserved communities; reduced out-of-pocket costs when integrated into public health services; and community empowerment by encouraging proactive health-seeking behaviors.

By directly addressing barriers to diagnostic access, TrueNAT stands out as a powerful tool for strengthening healthcare delivery and improving outcomes at the community level.

Panel Discussion: TB and HIV Challenges in Diagnosing

The panel discussion brought together community representatives, clinicians, and public health experts to reflect on field-level challenges affecting diagnosis under both programmes. Issues discussed included stigma, late care-seeking, service fragmentation, and uneven availability of diagnostics at peripheral facilities. **Moderated: Blessina Kumar**

P. Kousalya

Kousalya explained that at the beginning of the HIV/AIDS epidemic, the first challenge in diagnosing HIV was that women were only tested if their husbands tested positive, or if they were female sex workers, who were tested under Targeted Interventions. Currently, women are tested during pregnancy and surgeries, but very few come in for testing on their own. It's estimated that 50% of people living with HIV (PLHIV) in India are women, yet there is minimal support for them beyond antiretroviral therapy (ART). Many of these women also face issues like anaemia and poverty, but there is a lack of integration of women living with HIV (WLHIV) into programs that address anaemia or poverty elimination.

S. Nooriamma

In response to the question about the challenges of TB and HIV diagnosis among key populations, Ms. Nooriamma highlighted that the double stigma faced by these groups is the biggest challenge. She shared her personal experiences and concluded with two key points: first, "You can live with a disease, but you cannot live with stigma." Second, she asserted, "No formal education is required to become a leader or to effectively advocate for vulnerable communities."

Dr Rehana Begum

KHPT is the primary recipient of TB, so she mainly mentioned the major activities in the project and how they are planning to implement them. KHPT, as the Principal Recipient for the Global Fund TB grant in India, is leading the IMPACT project to accelerate TB elimination by strengthening prevention, detection, and treatment. The project mobilises communities through TB Mukt Panchayats and engages TB survivors as champions to raise awareness and support adherence. It also focuses on building health system capacities, expanding early detection and screening, ensuring treatment adherence through counselling and peer support, and integrating TB services with public health schemes. By promoting community-led prevention, strengthening referral pathways, and providing comprehensive care—including nutritional and psychosocial support—KHPT aims to reduce TB burden and align efforts with India's National TB Elimination Programme and the 2025 target of ending TB.

Key takeaways from the panel discussion

Decentralization of Diagnostics

Challenges arising from the lack of decentralized facilities were noted, with ART centers often only having unavailable CBNAAT, and long patient travel distances. The TrueNAT platform, designed for decentralised, real-time PCR testing to reach remote settings, directly addresses this. Ms. Poongodi advocated for pushing the molecular POC machines at the TB units.

Lack of information on the services available

Kousalya pointed out that new technologies and services are available but public as well as PLHIV networks are not aware of these and should be make them aware of it.

Biggest killer of people living with HIV

Blessina reminded the PLHIV leaders and warriors that tuberculosis remains the biggest killer of people living with HIV, with an alarming death rate in India. She questioned why HIV-positive networks often do not make TB elimination a core focus, despite its direct impact on survival, and why stronger advocacy for TB control is not integrated into the National AIDS Control Programme (NACP). Her message emphasized that tackling TB alongside HIV is essential, since rapid identification and treatment of TB among PLHIV can save lives and significantly reduce mortality, making TB advocacy a critical responsibility for HIV networks.

Day Two: Advocacy Capacity Building and Regional Action Planning

Introduction to Advocacy

In the introductory session on advocacy Blessina focused on building a clear understanding of what advocacy means and why it is essential in public health programmes. Participants were guided through the basic definitions and objectives of advocacy, highlighting its role in influencing policies, mobilising communities, and ensuring accountability. The discussion distinguished between reactive advocacy, which responds to immediate challenges, and proactive advocacy, which anticipates and addresses long-term needs. Emphasis was placed on practical tools such as evidence generation, media engagement, social mobilisation, lobbying, and coalition-building, with the session underscoring that effective advocacy must align with national and state programme structures to create sustainable impact.

The session also outlined the steps in advocacy, beginning with identifying the issue, gathering evidence, setting clear objectives, mapping stakeholders, developing strategies, implementing actions, and finally monitoring and evaluating outcomes. Participants were reminded of the do's and don'ts in advocacy: do base arguments on credible evidence, build alliances, engage with media responsibly, and align with policy frameworks; don't rely on assumptions, ignore programme structures, or adopt confrontational approaches that may reduce credibility and impact.

Together, these insights provided a strong foundation for participants to engage in effective, structured, and impactful advocacy.

Group Work: Regional Advocacy Action Plans

The group work session on state-wise Advocacy Action Plans, designed to translate technical knowledge and advocacy concepts into practical, region-specific strategies aligned with national and state HIV and TB programme priorities.

Participants were divided into three working groups, ensuring balanced representation from community networks, civil society organisations, and public health advocates. Each group was tasked with developing a structured advocacy plan focused on improving equitable access to molecular point-of-care (POC) diagnostics for HIV and TB within their respective regions.

Process and Methodology

Each group followed a guided planning framework that included:

- Identification of core diagnostic gaps at district and state levels
- Mapping of key stakeholders and duty bearers, including SACS, DAPCU, District TB Officers, and health administrators
- Defining advocacy objectives and priority targets aligned with NACO and NTEP frameworks
- Proposing concrete activities, timelines, and resource requirements

In a 30-minute time, each group documented their plans visually on chart papers, enabling collective discussion, clarity of thought, peer learning, and structured feedback.

Key Focus Areas Identified by Groups

1. Expanding Access to Molecular POC Diagnostics
Participants highlighted limited availability of molecular diagnostic tools at peripheral health facilities, particularly at ART centres, District hospitals, Mobile and outreach testing units

Advocacy strategies proposed included:

- District-level data collection on unmet diagnostic needs
- Structured engagement with State AIDS Control Societies (SACS), DAPCU, and NTEP officials
- Formal submissions and interface meetings advocating for deployment of molecular POC platforms such as Truenat at decentralised sites

2. Integration of HIV and TB Testing Services
Groups consistently emphasised the need for integrated HIV–TB testing, especially for people living with HIV and other high-risk populations.

Proposed actions included:

- Strengthening coordination between HIV and TB programmes at the district level
- Advocacy for one-stop testing models to reduce multiple visits and loss to follow-up
- Promotion of same-day testing and referral pathways to enable early treatment initiation

3. Ensuring Uninterrupted Supply of Diagnostics and Medicines
Supply chain disruptions and stock-outs were identified as recurring barriers affecting diagnosis and continuity of care.

Groups recommended:

- Community-led monitoring of diagnostic kit and medicine availability
- Regular interface meetings with programme managers and district health authorities
- Systematic documentation and escalation of stock-out issues through formal grievance redressal and reporting mechanisms

4. Strengthening Accountability and Community Monitoring
Participants underscored the importance of community ownership and accountability mechanisms in sustaining access to diagnostics.

Key strategies included:

- Use of community-generated data to support advocacy messaging
- Engagement with media and local platforms to highlight diagnostic gaps
- Building alliances with civil society organisations and health networks
- Regular follow-up with decision-makers to track commitments and implementation

Overall Significance

The group work session reinforced that access to molecular diagnostics is not only a technical issue but also a matter of governance, equity, and accountability. By grounding advocacy plans in field realities and community experience, participants demonstrated readiness to take forward evidence-based and rights-centred advocacy at regional and state levels.

This session marked a critical shift from knowledge sharing to action planning, ensuring that participants leave equipped with practical tools to influence diagnostic access beyond the training setting.

Key Outcomes and Conclusion

Key Outcomes

Improved Understanding

Improved participant understanding of HIV and TB diagnostics within NACP and NTEP frameworks

Strengthened Capacity

Strengthened capacity for evidence-based, programme-aligned advocacy

Action Plans

Development of region-specific advocacy action plans

Enhanced Collaboration

Enhanced collaboration between community networks, civil society, and technical experts

Reinforced Commitment

Reinforced commitment to people-centred, rights-based diagnostic access

Conclusion

The Southern Region Training of Trainers successfully strengthened community and civil society capacity to engage constructively with national and state HIV and TB programmes. By combining technical knowledge, programmatic perspectives, and structured advocacy planning, the training equipped participants to support NACO and NTEP efforts to improve early diagnosis, service integration, and equity. The focus on molecular point-of-care diagnostics highlighted a critical pathway for improving cascade outcomes and accelerating progress toward national HIV and TB targets through informed, collaborative advocacy.