

TIFA Accelerator Series – India

Demonstrating differentiated care to reduce preventable mortality among people with TB

"Our prime minister has set a bold target of a TB-free India by 2025, five years ahead of the Sustainable Development Goal targets of 2030. In pursuit of this effort, we have launched a district-wide differentiated TB care initiative through a USAID-funded TIFA Project TB commitment grant," explained Dr. Santosh Kumar Behera, District TB Officer, Jagatsinghpur, Odisha.

Tuberculosis (TB) is a leading cause of death in India, and reducing TB mortality is a key goal of the National Strategic Plan for TB (2017-25). Not all patients need the same level of care, but patients who have comorbidities (and so are high-risk) frequently fall through the cracks. India's National TB Elimination Programme (NTEP) is dedicated to preventing death, loss to follow-up, and treatment failure among people with TB.

In 2020, the NTEP developed a resource for differentiated care of people with TB to improve treatment outcomes. The document explains how to assess basic clinical parameters of all notified people with TB at the time of diagnosis; stratify their risk through a scoring system; and provide patient-centric care to mitigate the risk factors.



Figure 1: TIFA grantee implementation sites – Jhpiego, World Health Partners, and William J. Clinton Foundation

As part of the **Global Accelerator to End TB**, the **United States Agency for International Development** (USAID)-funded Tuberculosis Implementation Framework Agreement (TIFA) project, led by **JSI Research & Training Institute, Inc.** with partner **Open Development**, focuses on enhancing collaborative, locally-led efforts to build countries' capacity to plan, finance, monitor, and sustain their own high-quality TB programs. TIFA works with country partners to develop fixed amount awards—known as TB commitment grants (TCGs)—contracts, or other awards to support priority activities.

Under TCGs, accountability and funding amounts are based on results: negotiated **milestones** are tied to payments.

Together, NTPs and USAID identify country priorities, TIFA then works closely with them to develop the grant. TB commitment grants are implemented by NTPs or local entities. Completed milestones are submitted to and verified by USAID and TIFA. The **TIFA Accelerator Series** highlights grant achievements.

Addressing the Challenge

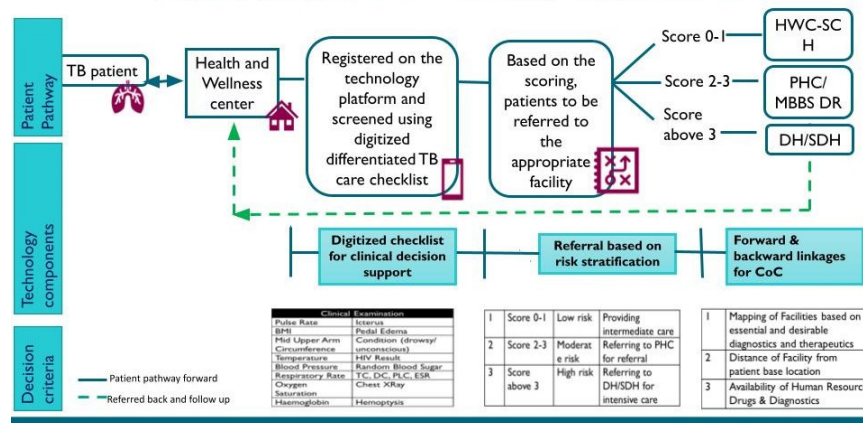
Although available since 2020, states struggled to implement the Differentiated TB Care guidance because they lacked models to do so. At NTEP's request, TIFA funded grants to Jhpiego, William J. Clinton Foundation, and World Health Partners to demonstrate models of differentiated care at the community, and primary and secondary health care levels. The three grants include evaluation of basic clinical parameters (vitals, general conditions, etc.); routine investigations to promptly identify high-risk patients; and referrals to reduce morbidity and preventable mortality among people with TB. Collectively, these models aim to strengthen the health care system to support sustainable differentiated care and improve referral pathways for people with TB at high risk.

Demonstrating Models of Differentiated Care

The grantees are implementing across a wide geography (*Figure 1*) and service delivery levels so interventions are tested in different contexts that represent the diversity of India. Each grant assesses the availability of essential diagnostics, therapeutics, and human resources for providing differentiated TB

care at facilities; facilitates availability of essential diagnostics and therapeutics wherever required; builds a system of risk assessment and referral; and intensifies care of severely ill people with TB to prevent death. Each grantee also trains health care providers and staff on risk assessment and referral linkage using a set of standardized tools and checklists.

Figure 2: Differentiated TB care approach at the primary health facilities implemented in Ri Bhoi (Meghalaya), Bhopal (Madhya Pradesh), Jagatsinghpur (Odisha)



In India, TIFA works with USAID and the National TB Elimination Program (NTEP), stewarded by the Central TB Division of the Ministry of Health and Family Welfare, to award grants and other contracts to government entities, international and local NGOs, and private sector partners. Awardees implement catalytic activities, helping the NTEP to test, critically assess, prioritize and/or scale new interventions needed to fill program gaps and accelerate progress in its 2025 TB elimination strategy.

Initial Activities & Findings

At the start of the intervention, each grantee trained health care providers on the differentiated TB care approach using training packages tailored to the community and primary and secondary health care levels. While all three grantees expand the availability of differentiated care, they use different models to do so. Jhpiego uses a mobile application (TB Triage) to record patient data, identify high risk cases, and suggest appropriate referrals. World Health Partners initiated call center-based follow-up and counseling for people with TB at high risk. The William J. Clinton Foundation developed a facility matrix to guide referrals of people with TB at high risk for additional care.

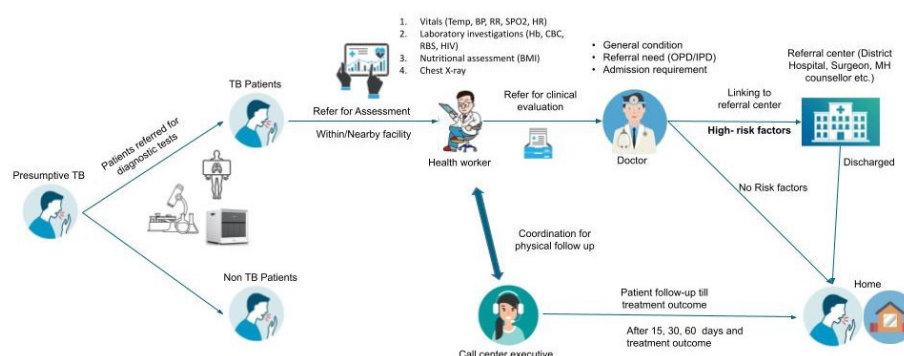
Through these interventions, TIFA grantees have mapped 372 intervention facilities across 11 districts in eight Indian states. They have trained 294 health care providers, including community health and medical officers, as well as NTEP staff in the differentiated TB care approach. All people with TB in these facilities were investigated for the high-risk parameters outlined in the differentiated care guidance (see box). Across all three grantees, 81 percent of 1,627 enrolled people with TB have at least one abnormal clinical parameter. To date, grantees have identified 52 percent of enrolled patients as high risk (i.e., those with more than three abnormal parameters). Those in need of further services are referred to higher facilities.

Box 1: Clinical parameters/lab tests conducted under differentiated care approach

- Pulse rate
- Temperature
- Blood pressure
- Respiratory rate
- Oxygen saturation
- BMI
- Mid-upper arm circumference
- Pedal edema
- General condition
- Icterus
- Hemoglobin
- WBC
- RBS
- HIV
- Chest X-ray
- Hemoptysis

“We are working through the TB Triage app and our experience is that the initial assessment of patients based on these 16 parameters was sufficient for quick diagnosis and referral for hospitalization. As a result, the chances of saving lives increases and we ensure a continuum of care for high-risk people with TB,” explains Dr. Behera.

Figure 3: Differentiated TB care approach at the secondary facilities implemented across five districts in Uttar Pradesh



"In addition, clinical and diagnostic capacity was strengthened in health facilities. This will help us improve social support and the quality of life for people affected by TB, ensure successful treatment outcomes, and prevent disease and deaths in the community."

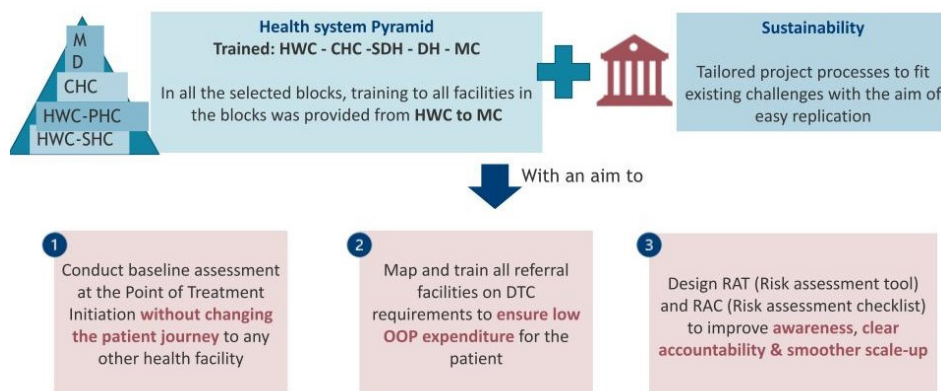
The Way Forward

All three grantees continue implementation. Interim results indicate that the outcomes are very promising, and at least one state has begun to scale-up the activities. The national program and the states are keen to review and evaluate these results.

Expected outputs of these grants include scalable models such as training modules for health care providers, evidence on the effectiveness of the digital application for risk stratification and referral, and data on the number of deaths prevented by differentiated care. Further, these models will also inform NTEP about health systems gaps that inhibit high-quality TB service delivery and which, if filled, can contribute to substantial improvements in patient outcomes.

Differentiated TB care helps in identification of at-risk people with TB at initiation of treatment, and focused interventions helps in better outcomes," explained Dr. Manish Misra, district TB officer, Unnao.

Figure 4: Differentiated TB Care approach at the primary and community level implemented in Srinagar (Jammu & Kashmir), Ahmedabad (Gujarat), Muzaffarpur (Bihar), and Durg (Chhattisgarh)



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