



Digital Chest X-ray for TB pre-diagnosis screening in a Community Health Centre in Uttar Pradesh

»» Global, National, State level Scenario

India contributes to about 27% of the world's individuals living with TB¹. One in five persons diagnosed with tuberculosis in India, are from Uttar Pradesh². Uttar Pradesh bears 17% of India's population and is its most populous state with 75 districts and 18 divisions. In 2020, UP's overall TB notification rate (158/100000) and private sector contribution (34%) was higher than the India average (131/100000 and 31%). Repeated rounds of the National Family Health Survey point to higher prevalence in the rural than urban population. Other studies also suggest that the estimated burden of TB in the private sector could be much higher^{3,4}. By 2020, UP had registered about 21778 health care facilities, including hospitals (18611), Laboratories (1676) and Chemists (1491) under the Nikshay. However, only 28% of these facilities had (6018 of 21778) notified at least one TB patient in 2020⁵.

¹ Global TB Report 2023

² Central TB Division, India TB Report 2023, National TB Elimination Annual Report

³ Arinaminpathy N, Batra D, Khaparde S, Vualnam T, Maheshwari N, Sharma L, Nair SA, Dewan P. The number of privately treated tuberculosis cases in India: an estimation from drug sales data. *Lancet Infect Dis.* 2016 Nov;16(11):1255-1260. doi: 10.1016/S1473-3099(16)30259-6. Epub 2016 Aug 25. PMID: 27568356; PMCID: PMC5067370.

⁴ National Health Profile, 2019-14th issue, CBHI, DGHS, MoHFW GOI

⁵ Central TB Division, India TB Report 2021, National TB Elimination Program Annual Report





National Strategic Plan (2017-25) aims to eliminate TB by 2025 with a vision for TB-Free India with zero deaths, disease and poverty due to TB and set a target to reduce TB incidence to 4.4 per Million by 2025.



UP accounts for 17% of India's population, 20% of India's TB burden, 31% of private sector anti-TB drug sales

About State Technical Support Unit (Tuberculosis) Uttar Pradesh

The Government of India's National TB Elimination Program aligned with the National Strategic Plan (2017-25) aims to eliminate TB by 2025⁶ with a vision for TB-Free India with zero deaths, disease and poverty due to TB and set a target to reduce TB incidence to 4.4 per Million by 2025. TB diagnosis and treatment is a prerequisite for achieving the milestones and targets for reductions in TB incidence and TB mortality.⁷

Aimed at implementing a “Programme Towards Elimination of Tuberculosis”, the Government of India in 2021, in collaboration with World Bank, initiated State Technical Support Unit (Tuberculosis) in nine high burden states, including Uttar Pradesh, to strategically enhance the government's engagement with the private sector, strategic purchasing and health systems strengthening for TB detection, treatment and prevention and improved multi-sectoral engagement for TB, among other functions. Subsequently, under a separate initiative, five other states in India established technical support units with external funding, accounting for about 80% of all TB notifications nationwide.

The Central TB Division (CTD), with World Bank Funding, contracted IHAT to implement the State TB Technical Support Unit (STSU) in Uttar Pradesh in December 2021. The Institute for Global Public Health, University of Manitoba provides technical leadership for this initiative.

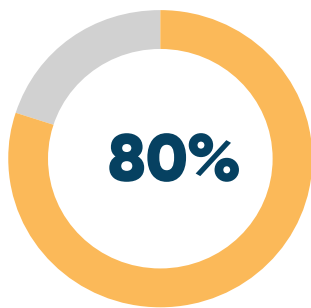
⁶ National Strategic Plan (2017-25)

⁷ Global TB Report 2023

TB Elimination – The Mission

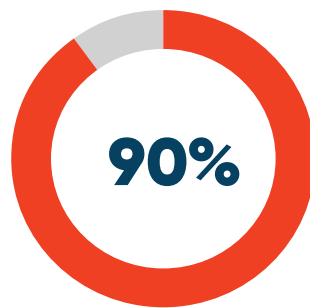
Mission: Under the National Strategic Plan (2017- 25), India has committed to Ending TB by 2025. Reduce TB deaths by 90%, TB incidence by 80%, and catastrophic expenses to zero as compared to 2015

TB incidence rate



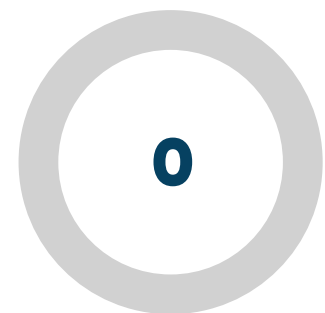
Reduction in TB incidence rate [as compared to 2015 levels]

TB mortality rate



Reduction in TB mortality rate [as compared to 2015 levels]

**Catastrophic expenditure
Due to TB**

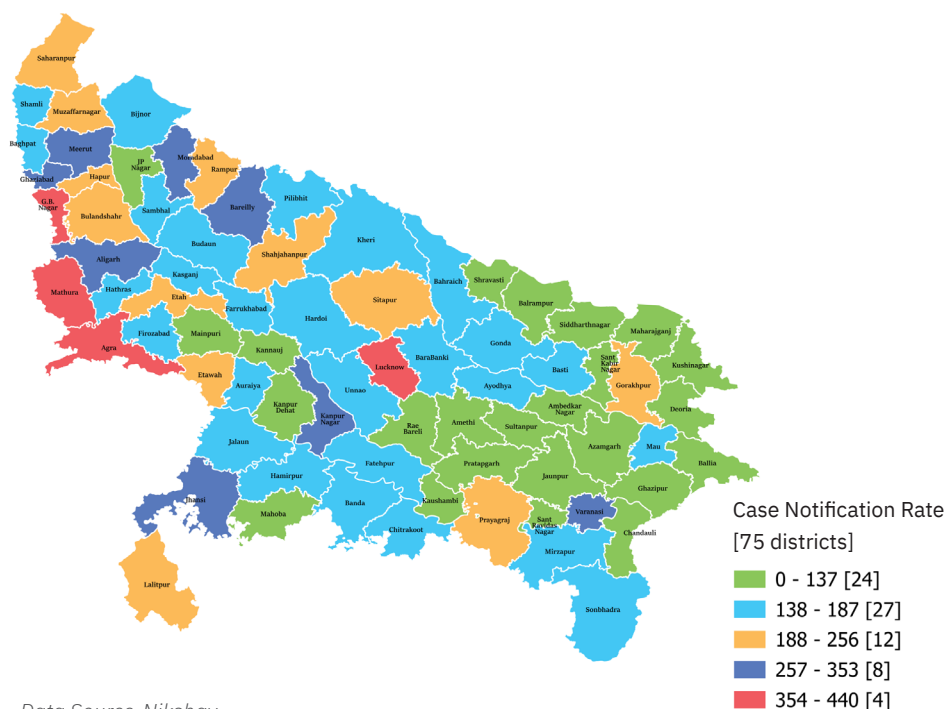


Cartridge Based Nucleic Acid Amplification Test(CB-NAAT) Machine for early diagnosis of tuberculosis installed at a District Tuberculosis Centre (DTC) in Barabanki, Uttar Pradesh



A Snapshot of TB in Uttar Pradesh

TB Case Notification Rate per 100,000 population, UP, 2021



Data Source-Nikshay



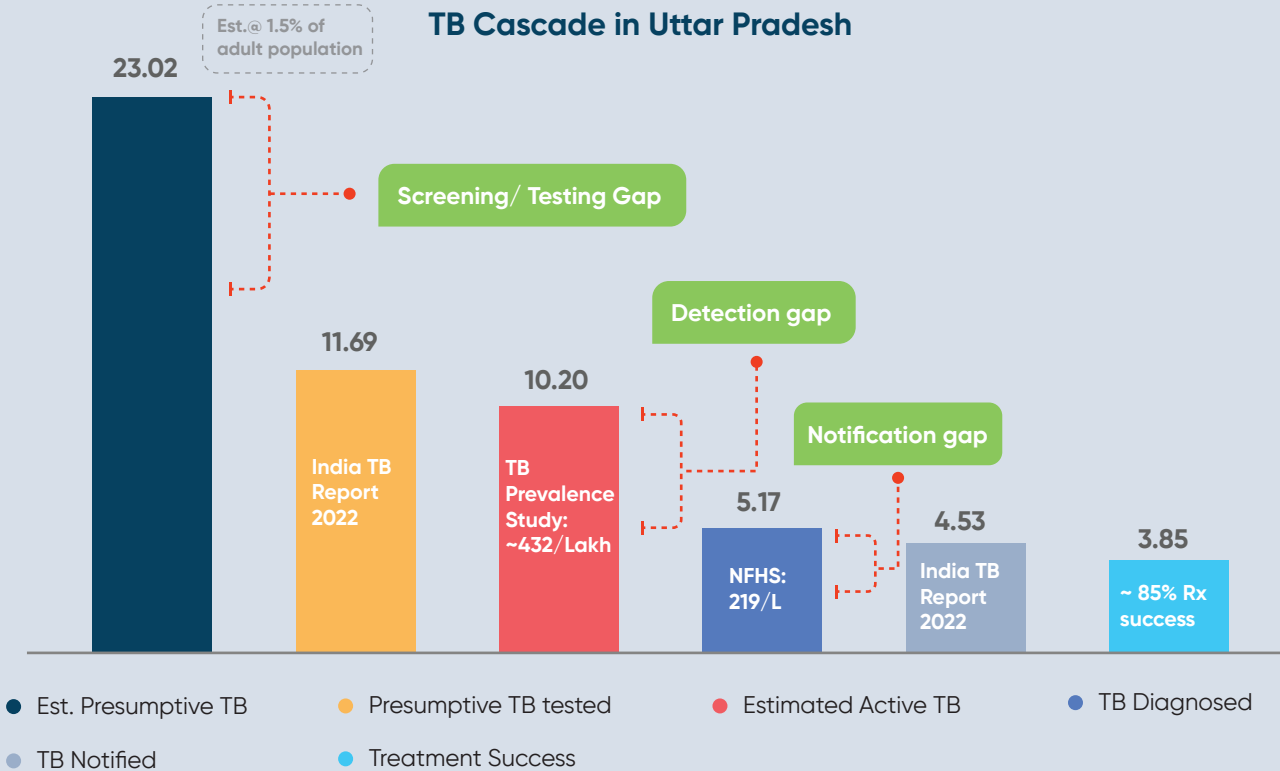
The Central TB Division (CTD), with World Bank Funding, contracted IHAT to implement the State TB Technical Support Unit (STSU) in Uttar Pradesh in December 2021.

Project Geography	Demography
18 divisions 75 districts 1160 TB Units 827 Blocks Patient Provider Support Agency -0/36 57647 Gram Panchayats	<ul style="list-style-type: none"> 240 million projected population accounting for 17 percent of India's total population (Reference, Report of the Technical Population projection July 2020 (2011-2036, MoHFW) 77 % of the population of the state is rural

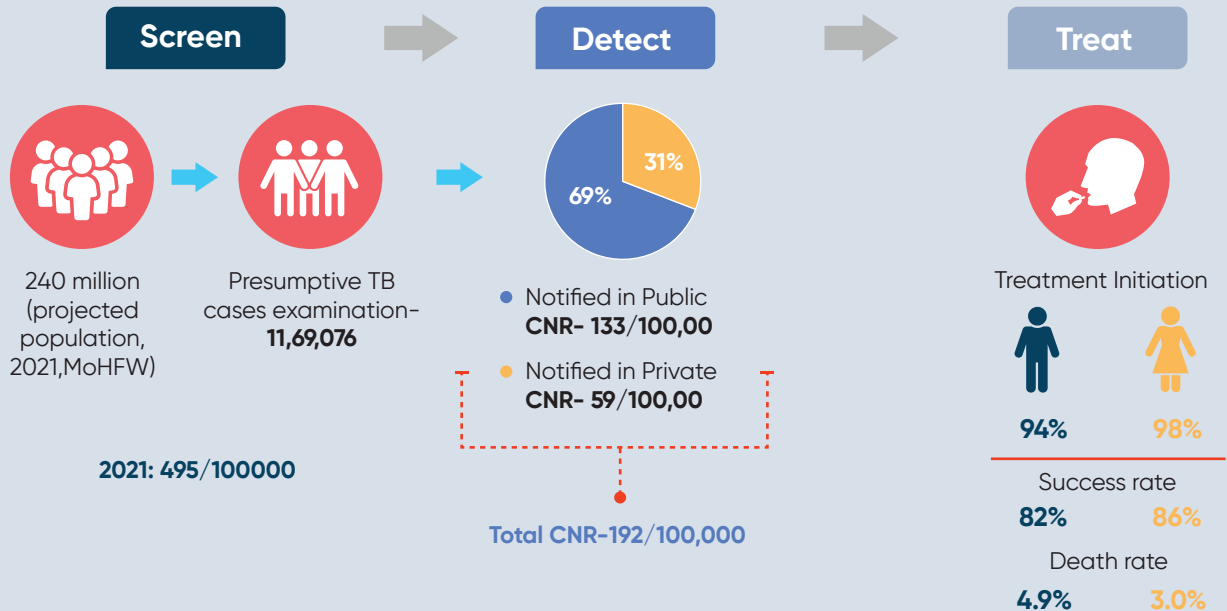
Table 1: Number of persons per 100,000 usual household residents suffering from any tuberculosis and medically treated tuberculosis in Uttar Pradesh, India(Reference National Family Health Survey (NFHS) 3,4,5)

	TB	Medically treated TB
NFHS-3	450	425
NFHS-4	346	337
NFHS-5	219	209

TB Cascade in Uttar Pradesh



Summary of TB in Uttar Pradesh, 2021



Strategies to Increase PTER:

- ASHA mobilisation to HWC/PHC
- Specimen Collection & Transportation from PHI to DMC
- 5% of OPD attendees in Public Health facilities
- ACF bi-annually at HH
- Scale up TB testing capacity

Strategies to Increase Notifications:

- PPSA in priority districts.
- PPM to engage with pharmacists and labs
- Scale up TB diagnostics (CXR & NAAT)

Target 90% Success Rate:

- Reduce not-evaluated
- Adherence measures: 99DOTS, FU, Care-lines, PPSA, Differentiated Care, Nutrition and DBT

TB Situation in Uttar Pradesh (2021)

427

Estimated TB prevalence per Lakh (National TB Prevalence Survey in India, Reference year 2019-21)

64%

The proportion of those with TB symptoms did not seek care (National TB prevalence survey 2019-21)

31%

Percentage of total sales volume of TB drugs in Uttar Pradesh at National Level followed by Bihar (13%) in 2021

Percentage of individuals with TB symptoms who:



Did not consult a qualified doctor= **64.1%** (Ref National from TB Prevalence Study 2019-2021).



Among those who sought care, first visit to a private facility = **59.4%**



TB Notified who are microbiologically confirmed in 2020 = **37%**

Tuberculosis Screening services at Ayushman Arogya Mandir in Uttar Pradesh



Strategic Approach

India Health Action Trust is guided by the Universal Health Coverage (UHC) principle to increase coverage and quality, reduce inequity, and support the person-centred, family-focused continuum-of-care for all individuals diagnosed with and at risk of developing TB, using an evidence-based program science approach to strengthen public-private sector partnerships and enhance multi-sectoral approaches for TB Elimination in Uttar Pradesh and India.

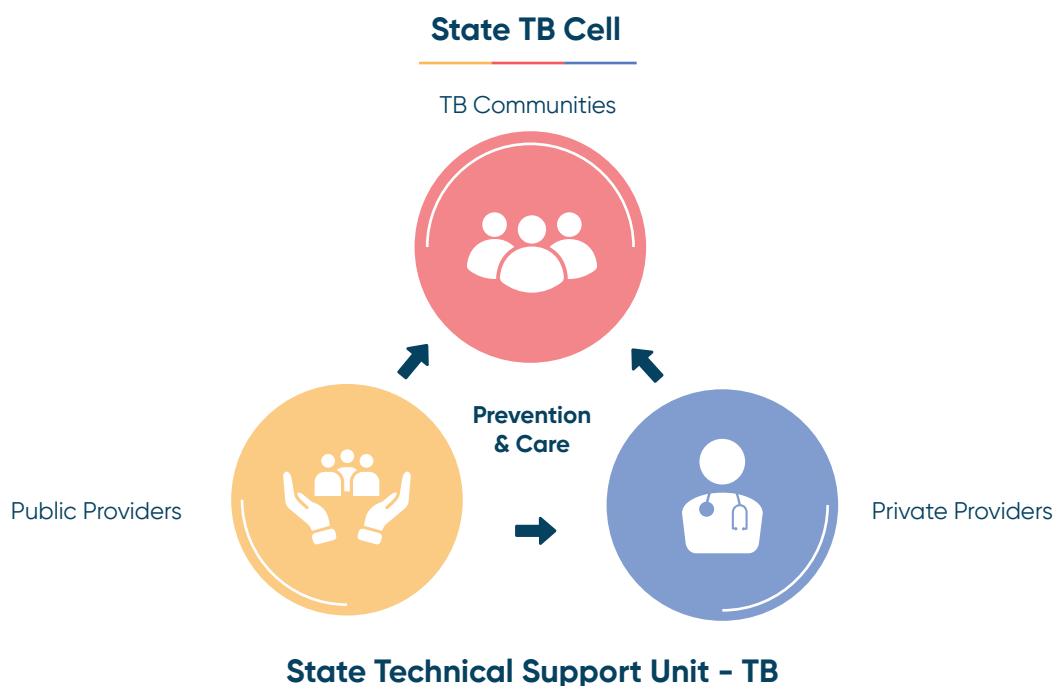
To enhance the effective coverage for TB services state strives to improve the accessibility, quality, and utilization of TB services in both public and private sector, with due focus on gender and marginalised groups, throughout the entire spectrum of care. IHAT builds on global best practices using program learnings to design innovative and comprehensive solutions to address critical barriers to access across the 3 main platforms – health facilities, communities and health systems.

State is dedicated to increasing the notification and quality of TB services and enhancing the involvement

of the private and public sector. State had budgeted funding in PIP to onboard Patient Provider Support Agency (PPSA) in 36 High Burden districts of Uttar Pradesh where private sector target for TB notification are high. Among these 36 districts, PPSA (Project :JEET) was operational in 16 districts until Decemeber 2021. IHAT State Technical Support Unit mandate as per the MoU is to collaborate with State TB Cell, the State TB Demonstration Centre, the State Task Force of Medical Colleges and the National Health Mission, to establish engagement with private and public healthcare providers, aiming to capitalize on the strengths of both sectors and optimize the utilization of government healthcare and social protection packages. The ultimate objective is to improve outcomes for TB detection, treatment and prevention.

TB STSU, Uttar Pradesh is dedicated to increasing the notification and quality of TB services and enhance the involvement of private and public sector in TB elimination.

Fig 1: Establishing linkages between the public and private sectors for improved delivery of TB services



Scope of Services of TB - STSU

The MoU laid down briefly the scope of services of State Technical Support Unit (Tuberculosis) Uttar Pradesh, which will be to support the State TB Cell to:

- To strengthen partnership models to improve TB case notification and people centred care across the entire cascade for both active and latent TB among those seeking care in the private sector.
- Implement effective and efficient health systems approaches, such that private health care providers have access to and utilize existing national TB resources.
- Strengthen multi-sectoral interventions to increase TB case detection, improve TB treatment outcomes, and to reduce catastrophic out-of-pocket expenditure of TB patients and their families.
- Optimize the surveillance, monitoring, evaluation, research, and learning from global and national best practices for TB programs across the public and private sector.



Aimed at implementing a “Programme Towards Elimination of Tuberculosis”, the Government of India in 2021, in collaboration with World Bank, initiated State Technical Support Unit (Tuberculosis) in nine high burden districts including Uttar Pradesh.

TRUENAT - rapid molecular testing for TB at a District Hospital in Uttar Pradesh



Objectives & Intervention Areas

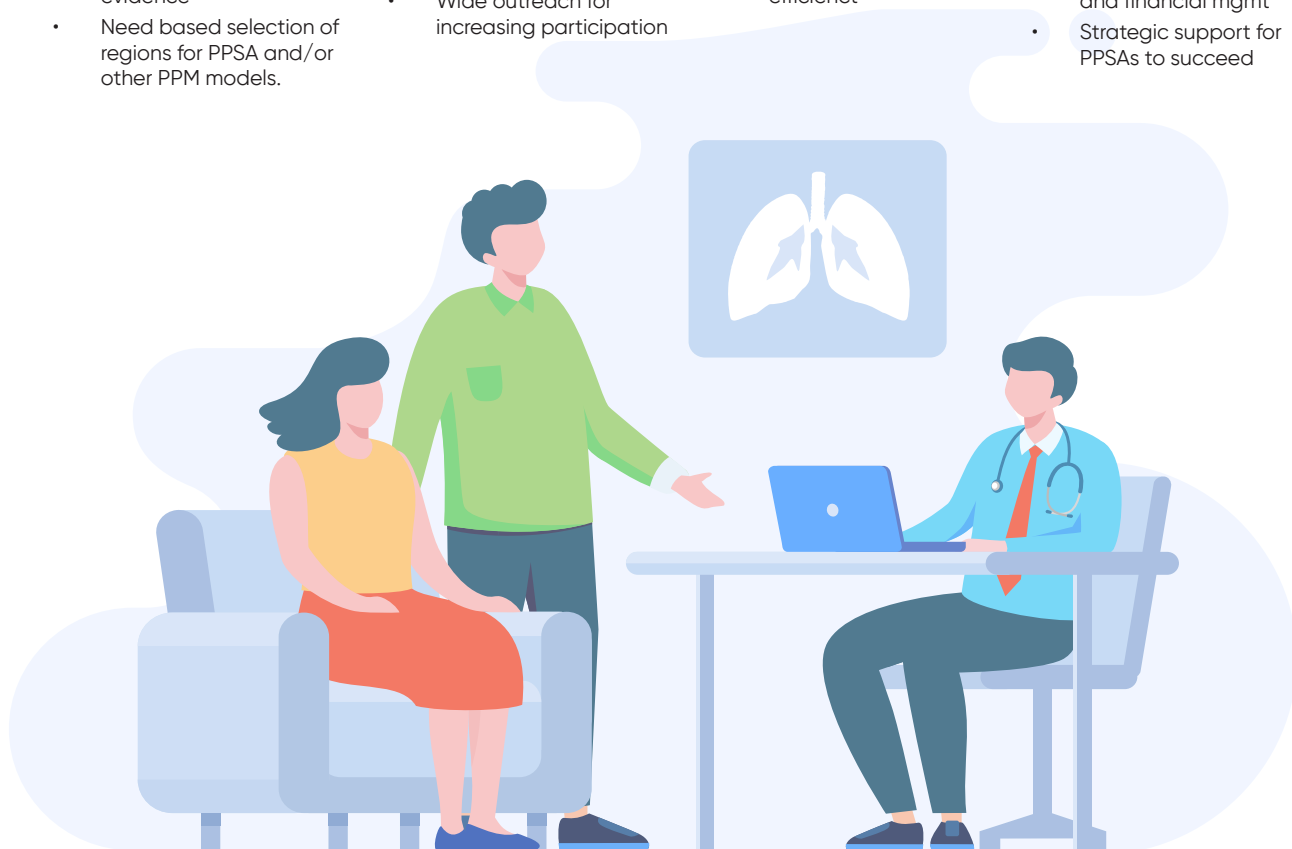
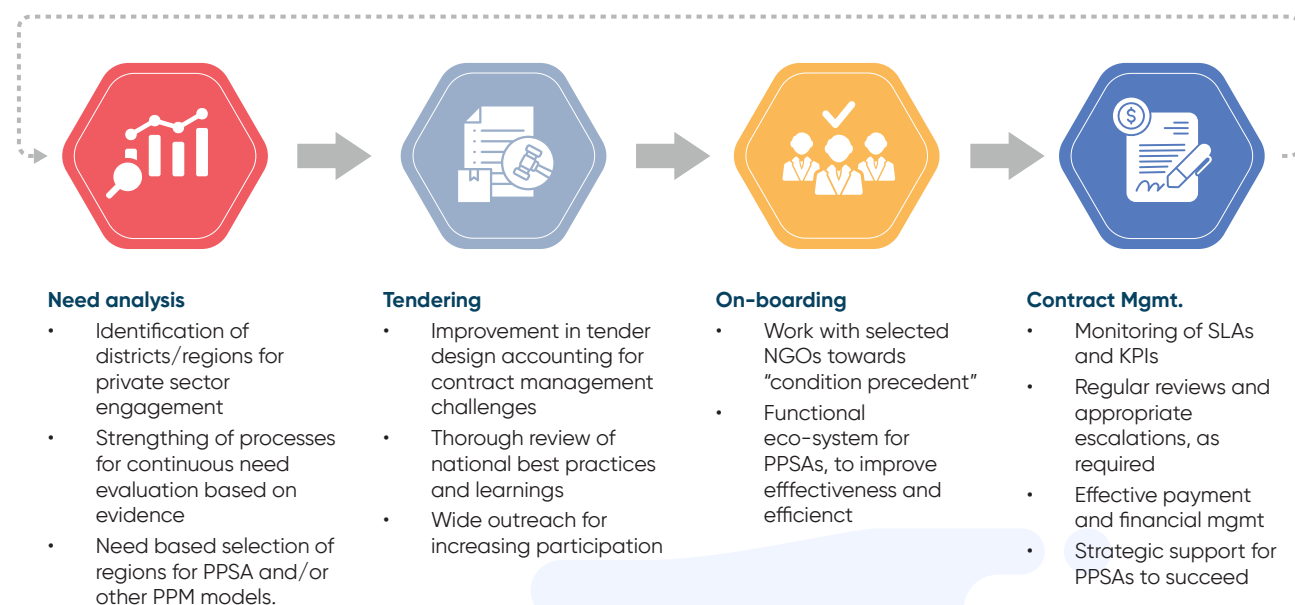
Objective 1: Strengthen Strategic Partnership Models & Improve Government Capacity in Contract Management

Support to the State TB Cell (STC), Government of Uttar Pradesh to enhance leadership capacity and establish a regulatory framework for streamlining partner procurement and contract management. Building

capacity of private service providers and managing the complete operational management of engagement of Patient Provider Support Agencies (PPSA).

Role of TB STSU and the procurement cycle

Technical & Operational Support to STC & NHM for long-term sustainability



Objective 2: Health Systems Strengthening

Support the state government in Uttar Pradesh to map and address gaps in the availability and competence of National TB Elimination Program (NETP) human resources across different levels of public healthcare facilities, the availability and functionality of TB diagnostics, and the distribution of TB notification and public health actions by district, facility and TB type across both public and private sector. The mapping exercise provides useful information to enhance availability and accessibility of TB services for rural and urban residents. A mix of strategies under Health System Strengthening include, establishing, technically supporting and monitoring linkages of NTEP services

with Health and Wellness or the Ayushman Arogya Mandir Centres, assessing and monitoring achievement of the target of 5% referrals of presumptive TB from public sector out-patients, expanding the coverage for microbiological confirmation of diagnosed TB, and strategic behaviour change communication for early detection of TB and improved TB treatment outcomes. The STSU explores, designs and implements innovative digital solutions to monitor TB drug sales in the private sector, in alignment with the mandatory TB notification government order issued to all pharmacies and chemists under Schedule H.

Key Elements for Strengthening Health Systems

Digital Health

Enhance digital health platform for reporting, adherence mechanisms and for data analysis

Capacity Building

Enhance adherence to standards for TB treatment in the private sector.

Behaviour Change Communication

Improve strategic behaviour change communication to drive health seeking and treatment adherence behaviours and reduce stigma against TB



Enhancing Testing

Enhance timely TB testing and microbiological confirmation of TB

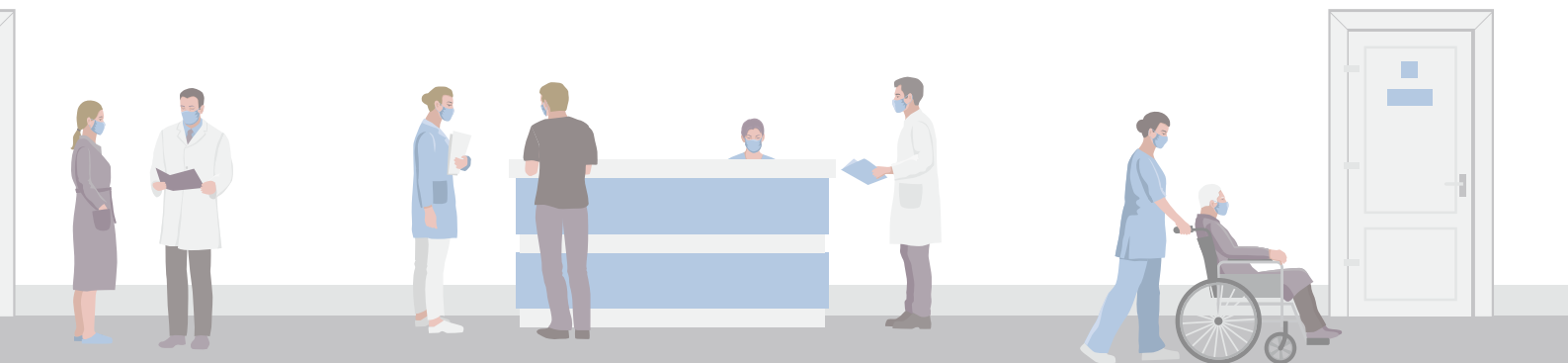
Increase Accessibility to Free TB treatment

Increase availability and access to TB treatment for patients notified by the private sector

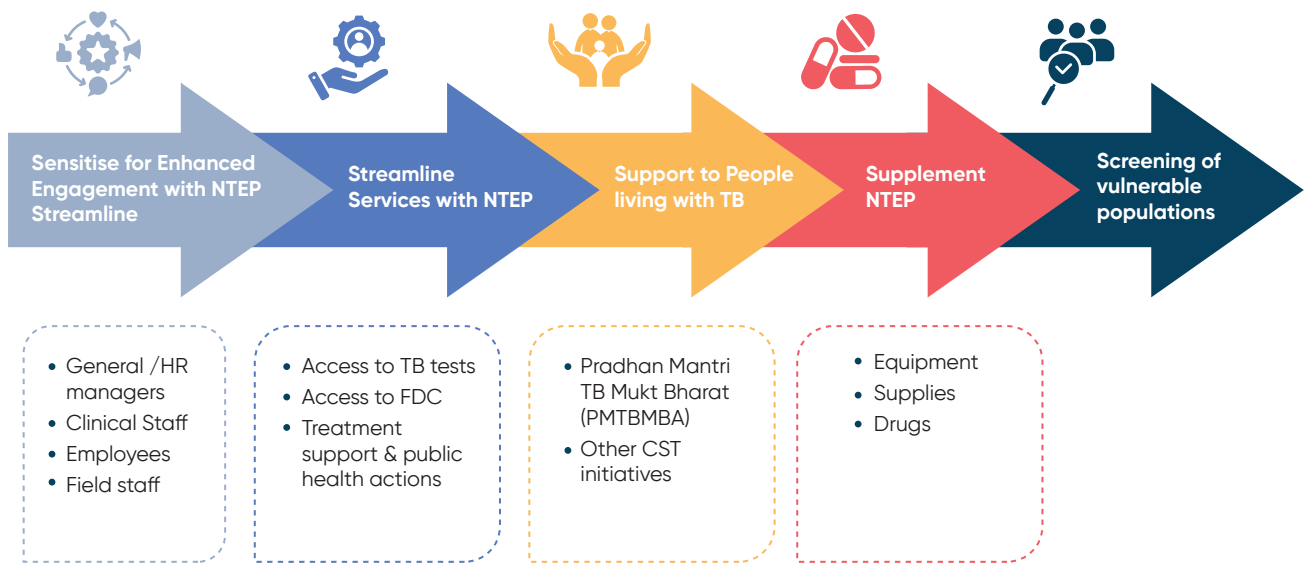
Objective 3: Strengthen Multi-Sectoral Engagement

Support to the State to a) enhance TB outreach services to vulnerable populations and industries, b) enhance social and nutritional responses for TB elimination through collaboration with other

government departments and Corporates under their Corporate Social Responsibility initiative and c) adopt a gendered approach focusing on the elderly, children, and adolescents.



Priority areas of Multisectoral Engagement to enhance State TB Response towards TB elimination



Objective 4: Monitoring, Learning and Evaluation

STSU supports the state in monitoring TB cascades for diagnosis, treatment and treatment outcomes, and for Direct Benefit Transfer at the State and District levels. STSU mandate is also to support and supervise Patient Provider Support Agency (PPSA) partners to enhance private sector engagement in the State. The STSU also

works with the State Task Force (STF) for program relevant TB operations research, to explore resources for special studies and implementation research. The STSU also aims to optimize use of Nikshay to review data as the single source of truth for action.

Elements of TB-STSU Monitoring, Evaluation, Research Approach



STSU TB pillars & key activities



Strategic partnership & models

- Enhance Leadership Capacity
- Establish regulatory framework
- Streamline partner procurement & Contract Management
- Ensure capability of Partners
- Build capacity of Partners



Health systems strengthening

- Digital Health for streamlining reporting and adherence
- Timely testing and microbial confirmation of TB
- Availability & accessibility of TB services for patient notified with private sector
- Build capacity of private service providers
- Strategic Behavioural change communication



Monitoring learning and evaluation

- Develop TB care cascades
- Strengthen STF for TB operations research
- Design protocols and explore fundings for special studies
- Quality Assurance and quality improvement
- Monitor drug sales to support Tb surveillance



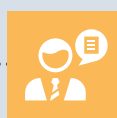
Multi-sectoral engagement

- Focus on most vulnerable
- Gendered Approach to reach women
- Outreach to population working in vulnerable industries
- Prioritize Elderly, Children and Adolescents
- Target closed institutional settings
- Integrate TB in Health and wellness Centres
- Explore partnership with insurance sector

Organizational structure of STSU- TB, Uttar Pradesh



Senior Technical Advisor
(Public Health)



Senior Technical Advisor
(M&E)



Senior Technical Advisor
(Procurement & Program Management)



Led by Team Lead (1)



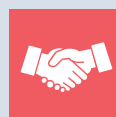
Deputy Team Lead (1)



Capacity Building
Expert



Public Health
Expert (2)



Public Private
Partnership Expert (1)



Inter-Sectoral
Engagement Expert (1)



Finance
Expert (1)



Information, Communication
& Technology Expert (1)



Contract
Management
Expert (1)



Direct Benefit
Transfer Expert (1)



Monitoring &
Evaluation Expert (1)

State Technical Support Unit (STSU) Tuberculosis - Uttar Pradesh: India Health Action Trust implements the STSU TB under the guidance of the Central TB Division and the National Technical Support Unit. The STSU, with the technical assistance of the Institute for Global Public Health, University of Manitoba, is supporting the Government of Uttar Pradesh in expanding the capacity of the State TB cell to manage large-scale private sector engagement, strategic purchasing, DBT and multisectoral collaboration using an evidence-based approach in Uttar Pradesh.

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