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Needs Assessment: A Tool to Determine Gaps in TB Programming That Can Be Addressed by Contracting

contract management tool · May 2024 · india

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# Introduction

A TB needs assessment can identify specific gaps and challenges that states can address by contracting with the private sector in support of TB elimination efforts. It is an annual activity endorsed by the National TB Elimination Program (NTEP) in its partnership guidance document on public-private partnerships (NTEP, 2019). The findings of the needs assessment can inform state-level operational planning and the inclusion of contracts in program implementation plans (PIPs) to increase the engagement of private partners at the state and district levels to address the unmet needs of the program.

This tool is a guidance document that explains the six main steps for conducting a needs assessment (see figure 1). It also describes how to analyze the data to identify major TB program gaps (by calculating gap scores) and provides guidance on selecting the appropriate partnership options to address those gaps. Additionally, it contains an illustrative activity plan with the expected timeline for implementing the needs assessment and information on the resources required. In the annex are structured questionnaires for conducting key informant interviews and focus group discussions, as well as a case study from the needs assessment conducted by Health Systems for TB (HS4TB) in Odisha State. Lastly, it contains step-by-step instructions on how to calculate gap scores using the Excel files packaged with this tool.

### Figure 1: The Needs Assessment Process

# Objectives

It is recommended that the program manager complete a comprehensive needs assessment to ascertain which partnerships are appropriate for a given location and to do so annually to account for the program's changing requirements. The main objectives of this assessment are:

1. Identifying gaps and challenges in implementing the NTEP
2. Evaluating the availability and accessibility of TB diagnosis, treatment, and care services, including laboratory facilities, and other resources such as human resources (HR) in the target areas
3. Identifying opportunities for collaboration with other stakeholders and partners in the health sector to strengthen the NTEP
4. Suggesting corrective measures for systemic gaps as well as identifying areas of programmatic gaps that can be addressed through effective private sector engagement

# METHODOLOGY

**Design of the Assessment:**

The assessment includes the following processes (table 1):

1. Complete a desk review and analysis of secondary data on the key programmatic performance indicators retrieved from the Ni-kshay portal to identify performance gaps in the NTEP. Findings will inform the development of a preliminary list of partnership needs.

Next, use a blend of qualitative and quantitative approaches to assess TB-specific needs.

1. The qualitative approach uses a semi-structured interview template that contains 15 questions on programmatic performance, private-sector engagement, engagement of civil society, partnership options, organization of the services, challenges faced/redressal mechanism, and leadership.
2. The quantitative approach requires primary data collection for issues and indicators not covered in Ni-kshay. This is used to validate the secondary data analysis findings, identify additional systemic and programmatic gaps not found in the desk review, and determine district-specific partnership needs.

After these data collections processes are complete, the remaining steps are:

1. Compile a list of issues and identify those that are better addressed through partnership options.
2. Ensure that the findings of the needs assessment (after the process of costing and budget estimation) are reflected in the next PIP.
3. Ensure that the findings of the assessment are made publicly available.

Table 1: Steps in the Assessment Plan:

| SN. | Activity(s) | Mode of Implementation | Resources/Data Sources/Tools to be Used | Key Output of the Activity |
| --- | --- | --- | --- | --- |
| 1 | Review performance indicators (e.g., notification, microbiological confirmation, DST, HIV testing, treatment outcomes, etc.) | Desk review of quantitative data | See data collection Step 1 below and the associated Excel for collecting and analyzing Ni-kshay data (previous five years) | Organized spreadsheets of indicators from the TB care cascade |
| 2 | Visit districts to identify systemic/programmatic gaps | In-person structured interview with NTEP program officers | See data collection Step 2 below (and see the interview and discussion guides in annexes 1, 2, and 3 | 1-page executive summary style analysis report summarizing identified systemic and programmatic gaps at the district level |
| 3 | Analysis and gap identification (e.g., inputs/activities/processes/HR) | Desk review and secondary data collection | See data collection Step 3 below for the methodology for collecting state- and district-level program records | Analysis report on programmatic and systemic gaps at the state level (see Annex 4 for suggested template) |
| 4 | Compile a list of all gaps and propose solutions | Content analysis | See analysis plan for needs assessment data using Excel tools | Recommendation on systemic correction/ partnership options |
| 5 | Present findings and gain concurrence of district officials | Meeting with district officials | See analysis plan to recommend systemic correction/partnership option | Final report and presentation |
| 6 | Communicate the findings to state authorities/National Health Mission (NHM) through proper channels | Follow-up and presentation to state authorities | See engagement with state officials to present final report | Official communication to the state authorities/NHM |

# DATA COLLECTION REQUIREMENTS

### Quantitative Data Collection (Step 1):

Secondary data on six key performance indicators (see table 2, column A) should be collected from the Ni-kshay portal of the Government of India using a semi-automated MS-Excel-based tool: the “Need Assessment Gap Score Calculation State Model”. The indicators are: (1) notification, (2) microbiological confirmation, (3) drug sensitivity testing (DST), (4) HIV testing, (5) diabetes testing, and (6) treatment outcome. See detailed instructions below under “analysis plan”.

### Qualitative Data Collection (Step 2):

An open-ended, semi-structured questionnaire (see annex 1) is used to conduct in-depth interviews of various stakeholders at different levels of the health system, such as the state, district, block, and community levels. The questionnaire consists of 15 questions addressing thematic areas of programmatic performance, private sector engagement, engagement of civil societies, organization of the services, challenges faced, redressal and governance mechanisms, and leadership (see table 2, columns B-D). These interviews aim to validate the gaps identified from the data analysis to inform prioritization of decision-making.

* The State TB Officer (STO), Joint Director (JD), State Public Private Mix (PPM) Coordinator, State Account Manager, and NHM Procurement Consultants will be the primary respondents at the state level.
* The District TB Officer, District Program Manager (DPM), District Program Coordinator (DPC), District PPM Coordinator, and District Accountant will be the primary respondents at the district level.

Some representatives of development partners and private sector actors should also be approached for in-depth interviews to learn about initiatives related to private sector engagement. Illustrative questions to guide this discussion can be found in annex 2. Conducting focus group discussions (FGD) can also be a way to gather perceptions and opinions from different stakeholders about the various partnership options. An FGD tool and a list of targeted participants can be found in annex 3.

### Quantitative Data Collection (Step 3):

Some data not available on Ni-kshay, such as key performance indicators on inputs, activities, and processes, may be collected from state- and district-level program records such as details on HR, training status, Nucleic Acid Amplification Tests (NAAT), and community engagement (see table 2, columns B-D). This data is not analyzed using the Excel tool but can be used to supplement or corroborate findings from primary data collection (Step 2) on the additional systemic and programmatic gaps not found during the review of Ni-kshay indicators and to determine district-specific partnership needs.

Table 2: List of Indicators for the Needs Assessment

| Desk Review: Review of Performance Indicators (A) | Primary Data Collection: Analysis and Gap Identification | | |
| --- | --- | --- | --- |
| Systemic Gaps (B) | Programmatic Gaps: Inputs and Processes (C) | Other Support Services/ Systems (D) |
| * Notification * Microbiological confirmation of TB * Drug sensitivity testing coverage * HIV testing coverage * Diabetes testing coverage * Treatment outcomes | * Logistics and supply chain for drugs/diagnostics/ consumables/equipment * Infrastructure * Human Resources * Training status, work environment analysis * Specimen management (collection and transportation) | * Presumptive TB examination * Testing (latent TB infection (LTBI), microscopy. Molecular tests, chest X-rays, extrapulmonary TB) * Screening (interferon-gamma release assays) * Nikshay Poshan Yojana (NPY) incentive scheme * TB preventive therapy (TPT), chemoprophylaxis * Adherence support, follow-up, linkages | * Community engagement * Advocacy, communication, and social mobilization (ACSM) * Active case finding (ACF) * Vulnerability mapping |

# ANALYSIS PLAN

*Secondary Data from Ni-kshay:*

After data from Ni-kshay are captured using the MS-Excel tool called the “Need Assessment Gap Score Calculation State Model” (see above), that Excel model calculates a composite gap score (CGS), which is the sum of the gap scores for the various Ni-kshay indicators collected during the desk analysis. The CGS, individual gap scores and other contributing factors, are then used to inform the potential partnership options to pursue.

The methodology divides the districts in the state into four quartiles based on past performance on the indicators. This will allow for more accurate ranking and prioritization of districts for focus, as districts differ considerably in population and demographics (including tribal districts) and district targets for Ni-kshay indicators are not evenly distributed.

Steps for Calculating the Gap Score in the State Model (data should be entered into yellow cells; all green cells represent auto-calculations):

1. Insert District Names into the excel sheet
   1. In cell B2 of the "1 Notification Gap" sheet, enter the total number of districts in the State.
   2. Add or remove rows as needed depending on the number of districts in sheets "0-6"
   3. Ensure formulas in columns with green highlighted cells are dragged down/copied to ensure formulas are applied to new rows that account for any increase in the number of districts.
   4. Enter (or copy and paste) district names into column B highlighted in yellow in the “Composite Gap Score” sheet. These will then auto-populate to the other sheets.
2. Download data from Ni-kshay for the previous five years (e.g., 2018–2022) for the six key NTEP indicators i.e. overall TB notification, diabetes testing, HIV testing, microbiologically confirmation, UDST and successful treatment outcome.
3. Copy in district-specific TB notification targets and achievements from the Ni-kshay for 2018–2022 into columns F-O of '1 Notification Gap' sheet. Columns P-T will auto-calculate the absolute notification gap; columns Y-AO will auto-calculate the notification gap score per year (where 0.25, 0.5, 0.75 and 1 represent gap scores from the best-performing to the lowest-performing quartile, respectively; see explanation below). Column AX auto-calculates the total notification gap score (the sum of the notification gap scores for each year), and column AY represents a ranked priority where the lowest number represents the highest total notification gap score and therefore the greatest programming need.
4. Copy in district-specific diabetes testing gap (Notified cases - DM test conducted) from the Ni-kshay for 2018–2022 into columns F-J of '2 Diabetes testing gap' sheet. Once again, the gap scores of 0.25, 0.5, 0.75 and 1 represent gap/performance quartiles.
5. Copy in district-specific HIV testing gap (Notified cases - HIV test conducted) from the Ni-kshay for 2018–2022 into columns F-J of '3 HIV testing gap' sheet.
6. Copy in district-specific TB notified cases and microbiologically confirmed cases from the Ni-kshay for 2018–2022 into columns F-O of '4 MC gap' sheet.
7. Copy in district-specific UDST gap (Notified cases - UDST conducted) from the Ni-kshay for 2018–2022 into columns F-J of '5 UDST gap' sheet.
8. Copy in district-specific TB successful treatment outcome (%) from the Ni-kshay for 2018–2022 into columns F-J of '6 TB treatment outcome gap' Sheet. Consider the previous year’s cohort while calculating success rate (%).
9. Copy in district-specific private sector TB notification target, number of health facilities registered and Number of active providers from Nikshay for 2022 (or most recent year) into columns N-P of '0 Composite Gap Score' sheet. The private sector presence score auto-calculates, with one third of the score being assigned for each of three respective district thresholds: the number of private providers; the number of active private providers; and the number of private notifications assigned as a target. High private sector presence auto-calculates as “yes” if all three scores are above the respective thresholds.
10. Fill in the district-specific presence of tribal and hard to reach area, PPSA onboarding status, and presence of urban municipal corporations (MCs) into respective highlighted columns of the '0 Composite Gap Score' sheet. Information can be sourced from the Integrated Government Online Directory found at: https://igod.gov.in/leg/L008/organizations
11. Refer to 'Suggested Partnership Option' sheet to identify priority districts for primary data collection. In this sheet, the Excel re-orders and presents the districts in order from those with the highest to the lowest composite gap score (from column I of ‘0 Composite Gap Score’, which is the same as column J of ‘Suggested Partnership Option’).
12. Factors mentioned in columns D-N of 'Suggested Partnership Option' will help program managers/ committee members to decide the partnership options to insert in columns Q-S, based on suggested justifications mentioned in column 'W' and 'X'.
13. The tool requires insertion of data for the previously mentioned steps only.
14. Special Case: 3 Years/ 1 Year Analysis
    1. For a 3-Years/1-Year analysis, enter values in the columns corresponding to the initial 3 years or the first year where data entry is required.
    2. Update the column headings to reflect the appropriate years according to the initial 3 years or the first year.
    3. Ensure that data entry is done accurately and consistently for the selected time frame.

For each indicator and year, districts are divided into four quartiles (poor, moderate, good, best) based on performance. A score of 1 is assigned to poor-performing districts, i.e., in the bottom 25th percentile. A score of .75 is assigned to moderate-performing districts, i.e., between the 25th and 50th percentile. A score of .5 is assigned to good-performing districts, i.e., between 50th and 75th percentile. A score of 0.25 is assigned to the best-performing districts, i.e., 75th percentile and above.

Gap scores for each indicator and year over the period are summed to get a total gap score out of the highest possible score of 5 (in the case of five-year period) . The sum of the total gap scores across all indicators for the period represents the CGS out of the highest possible score of 25. Districts with high CGS should trigger action to facilitate discussions with district officials and collect primary data to validate actual program needs.

1. The indicator ‘High Private Sector Presence’ is determined by three variables: 1) Annual Target for Private Sector TB Notification, 2) Number of Private Health Facilities Registered in Nikshay, and 3) Number of Active Providers. For the first variable, if the Annual Target for Private Sector TB Notification exceeds 200, the district receives a score of 0.33. 200 is the minimum number of TB Notifications required for a Patient Provider Support Agencies (PPSA) to be considered financially viable. For the Number of Private Health Facilities Registered in Nikshay and the Number of Active Providers, these variables receive a score of 0.33 if they surpass thresholds of 50 and 20, respectively. These two indicators measure the availability of private health facilities and the presence of pulmonary/TB specialists in the district. A ‘High Private Sector Presence’ score of 1(Yes) signifies high potential for successful partnership with a PPSA in the district.
2. A slightly modified methodology for calculating the gap score in Delhi is used, given its uniqueness as a city-state, its high-density urban population, and the homogeneity of the population density across the districts of the city. There is a separate MS-Excel model used for Delhi and instructions for calculating the gap score using the “Delhi Model” can be found in annex 5. All other states should use the “State Model.”

Qualitative Data:

The content analysis of the in-depth interview data with the key stakeholders can reveal two types of gaps: systemic and programmatic. Identified gaps could be related to infrastructure, logistics, drugs, diagnostics, screening, human resources, and capacity building aspects of TB programming. Results from the qualitative analysis should be cross-checked with the quantitative analysis findings on the key performance, input, and process indicators.

Selecting the Partnership Options:

Partnership options are recommended based on the results from both the quantitative and qualitative portions of the needs assessment. Ideally, data collected and analyzed will identify weak gap scores that determine the needs of the districts, and action will be taken to match partnership options that can fill the programmatic gaps identified. In most cases, findings from the qualitative analysis will corroborate findings from the quantitative analysis. However, there may be situations when recommendations from the TB program officials interviewed may not be consistent with the gap score findings. In such cases, all results must be considered, balancing the TB program’s understanding of its needs with the quantitative results to reach alignment, though it is ultimately the TB program’s decision on which partnership option to pursue. Some guidance on possible justifications for particular partnership options can be found in table 3.

The desk review may reveal variables—for example, the prior operationalization of Patient Provider Support Agencies (PPSA) in the state or the existence of tribal and hard-to-reach areas—that factor into the partnership option decision. Gaps in the notification indicator are a sign that there is room for improved private-sector engagement, for which PPSA are one possible modality. In addition to improving notification, PPSA can also improve extended public health actions for private sector patients, which should have knock-on effects for improving treatment success rates. Furthermore, notification gaps can be addressed through various demand-generation activities, such as ACSM and ACF, to improve the health-seeking behavior in the community. In hard-to-reach areas, low treatment success rates can also be addressed through drug-access and drug-delivery services with improved public health action. Gaps in the diagnosis indicator can be addressed through diagnostic services and improved specimen management services in tribal and hard-to-reach areas.

In summary, the performance gaps identified with the Ni-kshay data analysis should be assessed together with the perspectives from program experts collected during primary data collection to arrive at the root cause of those gaps before deciding on the appropriate partnership option.

**Table 3: Potential Justifications for Partnership Options**

|  |  |
| --- | --- |
| Partnership Option (Suggested in Partnership Guidance Document - 2019) | Suggested Justification for Partnership Option |
| Patient Provider Support Agency (PPSA) | * High TB notification gap score * High private sector presence * More than 200 private sector TB notifications for PPSA financial viability * High TB notification target, given the population of the district * Low UDST gap score * Availability of urban conglomerations * Presence of Tribal and Hard to reach areas * High partnership need score |
| Advocacy, communication and social mobilization (ACSM) | * Presence of tribal and hard to reach areas * High TB notification gap score * Requirement of innovative ACSM activities * Lack of availability of appropriate human resources * Lack of adequate quantity of information, education, and communication (IEC) materials * PPSA not available in the district |
| Public Health Action (PHA) | * High TB successful treatment outcome gap score * PPSA not present in the district * High partnership need score * Need for augmenting public sector in identified regions |
| Diagnostic Services | * High HIV/DM/UDS/MC testing gap score * Low private sector presence in the district * Unavailability of adequate medical infrastructure at public health facilities |
| Active Case Finding (ACF) | * High TB notification gap score * Availability of urban conglomerations * Presence of tribal and hard to reach areas * PPSA not available in the district |
| Specimen Management | * High HIV/DM/UDS/MC testing gap score * Presence of tribal and hard to reach areas * Low private sector presence in the district * PPSA not available in the district |
| Drug access and delivery services | * Presence of tribal and hard to reach areas * High TB successful treatment outcome gap score * Shortage of drugs in public facilities |
| Treatment Services | * Low private sector presence in the district * High partnership need score * PPSA not available in the district * High HIV/DM/UDS/MC testing gap score |

# ENGAGEMENT WITH STATE OFFICIALS

The selection of partnership options is not the end of the process. Findings need to be presented to state officials and consensus gained on partnerships to pursue. Downstream activities after completion of the needs assessment (e.g., preparing budget estimates to determine feasibility of partnerships and conducting advocacy for inclusion in record of proceedings and PIPs) can be found in figure 2.

Figure 2: Subsequent Steps After Completion of the Needs Assessment

# RESOURCES REQUIRED TO CONDUCT NEEDS ASSESSMENT

The needs assessment is recommended to be conducted as an annual exercise for all districts in a State. The activity should be led by the State TB Cell with support from district teams to implement the activity in its neighboring districts. Therefore, district team members should be trained on the needs assessment process, in addition to State TB Cell members. This will ensure that there is adequate human resources equipped to complete the exercise in all districts within approximately 2 months. The State TB Cell will then collate the partnership needs from all districts and synthesize findings into a State-wide requirement for partnerships.

### Human Resources:

Under the oversight of the State TB Cell representative, the District Project Coordinator, District PPM Coordinator, and District TB Officer should take the lead on conducting the needs assessment at the district level. In most cases, District TB Cell (DTC)-level NTEP consultants can be used to conduct the needs assessment, although they need to undergo the requisite training to be able to implement such an assessment. The orientation must include approaches for conducting data collection (both primary and secondary data collection).

### Logistics Support:

The team (2–3 members) can take printed copies of the study tools and reach out to the stakeholders to administer questionnaires. If required, officials may need to go to TB Units and Designated Microscopy Centers in remote places to interact with the field functionaries of NTEP. Those officials can use recording devices to memorialize the salient points brought up during FGDs.

As mentioned above, this exercise is scalable at the district level, and personnel from district NTEP teams can carry out the exercise. Depending on the size of the district, the assessment could take 2–3 months to complete (see table 4). Therefore, this process should be started by June at the latest, in order to provide time to consolidate findings at the state level, conduct costing and negotiations, and then feed the results into the PIP process in September in alignment with the NHM PIP process. For further guidance, a case study for a needs assessment performed in Odisha State can be found in annex 6.

Table 4: Activity Timeline

| SN | Activity (s) | M1 | | | | M2 | | | | M3 | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| W1 | W2 | W3 | W4 | W1 | W2 | W3 | W4 | W1 | W2 | W3 | W4 |
| 1 | Finalize the methodology, objective, and study design |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Review performance indicators (e.g., notifications, microbiological confirmation, DST, HIV testing, treatment outcomes, etc.) |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Analysis and gap identification (e.g., inputs/activities/processes) |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Design tool for primary data collection |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Visit districts to identify systemic/programmatic gaps through primary data collection |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Compile a list of all gaps and propose solutions |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Present findings and gain concurrence of district officials |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Communicate the findings to state authorities/NHM through proper channels |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Incorporate the identified partnership options into the PIP process |  |  |  |  |  |  |  |  |  |  |  |  |

# ASSUMPTIONS AND LIMITATIONS

* Given the complexity of the program, understanding all granular details of each of the indicators tracked by the program may not be possible.
* The depth of the analysis largely depends on the resources, timeline, and feasibility of collecting the required data and conducting the assessment under practical situations.
* All suggestions derived from the needs assessment should be consistent with the design and objectives of partnership options described in the NTEP’s Guidance Document on Partnerships (NTEP, 2019).
* Implementation of suggestions on systemic/structural corrective measures will depend on the state’s needs and resources at hand.

# Annexes

## Annex 1. Interview guide with key stakeholders

### Section 1: General questions

1. How is the NTEP organized in your district and how has its performance been over the last 3–4 years?
2. What are the 2–3 key achievements of NTEP in your district?
3. What are the 2–3 key challenges in NTEP in your district?
4. What is the decision-making process in the NTEP team for your district?
5. How is civil society engaged in the TB response in your district?
6. How is the program reviewed in your district and what is the frequency of such reviews?
7. How is the private sector for TB engaged in your district?
8. What is the mechanism and frequency of meeting with these private sector and civil society organizations in your district? How is feedback mutually utilized in the district?
9. What are the different partnership options for TB being run in your district?
10. How are these partnership options being organized in your district?
11. What are the roles and responsibilities of the State TB Cell (STC) and District TB Cell (DTC) in making the partnerships functional?
12. What are the major challenges of partnership options in the district and how are they addressed?
13. How are the partnerships reviewed in the district and what is the frequency of such reviews?
14. What is the scope of new partnership options in your district?
15. Does the State TB Cell/NHM have any other feedback or support needs?

### Section 2: System related questions

1. Logistics and supply chain of drugs/diagnostics/consumables/equipment
2. Are sufficient stocks of drugs/diagnostics/consumables/equipment available in your district?
3. How long does it take to receive stock from the time it is indented?
4. Do private providers prescribe FDCs? Is there an adequate quantity of FDCs available in the district? Do private providers agree to dispense FDCs?
5. Did you face any specific challenges in indenting, maintaining, and distributing the drugs/diagnostics/consumables/equipment in your district?
6. Infrastructure
7. Does the infrastructure meet the NTEP needs? (e.g. the availability of diagnostic laboratories or the availability of vehicles for specimen transport may factor into the choice of partnership options)
8. Human resources
9. Are there any vacant positions in your District under NTEP?
10. What are the technical areas that require training of NTEP staff in your district?

### Section 3: Programmatic related questions

1. Presumptive TB examination
2. Are doctors aware of the need for presumptive TB examinations? Do you see any training gap in this area?
3. What is the presumptive TB examination rate in your district?
4. Is there an established specimen management mechanism for samples collected at non-DMC facilities?
5. How can the private sector improve presumptive TB examinations in your district?
6. Testing
7. Is there any test that has not been conducted – or conducted in insufficient quantity – during the last three months?
8. (Probing points: LTBI, microscopy, molecular tests, CXR, EP-TB, HIV, diabetes)
9. Is there any specimen transport system available in your district?
10. What is the approximate NAAT utilization rate in your district?
11. Are any testing services outsourced?
12. Is there any specific need related to TB testing in your district?
13. Screening for LTBI
14. What proportion of patients’ contacts are investigated? Is there a gap in coverage of contact investigation or identification or examination of symptomatic contacts?
15. Is the staff-to-patient ratio adequate for contact investigation?
16. Is the district planning to introduce LTBI management?
17. Is there any LTBI screening tool available in your district?
18. NPY
19. Is there a gap in collecting bank account details?
20. Is there an adequate staff-to-patient ratio to get bank account verification?
21. TPT
22. Are free LTBI tests available in your district?
23. Is there any sample transport system available for LTBI tests?
24. Is there a drug supply system available for TPT?
25. How is the Programmatic Management of TB Preventive Treatment being implemented in your district?
26. Adherence Support
27. Is there adequate IEC material available for adherence support?
28. Do you advocate with providers for treatment adherence services?
29. Is there any adherence monitoring system?
30. Is there adequate manpower available to track TB patients?

### Section 4: Other services related questions.

1. ACSM
2. What are the ACSM activities conducted in your district?
3. What is the frequency of ACSM activities conducted in your district?
4. What is the coverage of those activities?
5. ACF
6. Has the district conducted active TB case finding?
7. Is there sufficient IEC material available to spread awareness about ACF activity in your district?
8. Is there trained HR available to conduct ACF?
9. Is there any agency outsourced to implement ACF?

## Annex 2. Interview for private sector-related questions:

1. How is service delivery performed by NTEP linked with elements of the entire private sector?
2. In the districts where you work, are there plans for collaboration with the private sector for diagnostic and treatment services in the future?
3. What are the different types of TB-related services being provided by the private sector in the districts where you work? [Both laboratory and treatment services]
4. Can you share the details of these services rendered in the district where you work?
5. Has the public sector faced any service shortfall resulting from shortage of HR, lab reagents, consumables, or equipment, or from infrastructure issues in the districts where you work?
6. In such a scenario, has the NTEP collaborated with the private sector for service delivery?
7. Can you share the details of any such collaboration with the private sector during the last three years?

## Annex 3. Focus Group Discussion tool:

FGD refers to discussion among a small group of carefully selected participants on a particular topic. It is a qualitative method of data collection and involves a moderator to reduce bias and ensure legitimate results.

### Potential participants of FGD for needs assessment:

1. District NTEP officials
2. Private sector providers (clinics, nursing homes, specialists, corporate hospitals, NGOs)
3. Representatives of development partners working for NTEP
4. Community-based workers, such as TB Champions
5. Chemist and druggist association representatives

Sample size: 6–10 participants

Time duration: 60–90 minutes

### Pre-requisites for FGD

* A participant information sheet explaining the purpose of the FGD as it relates to the needs assessment
* A written informed consent to be signed by participants prior to conducting the FGD
* A convenient meeting place and time, ideally a meeting room large enough to accommodate 6–10 participants
* A questionnaire on demographic details
* Indicative list of questions to be used for the FGD
* Tape recorder/any audio recording device to record the FGD
* Moderators (two) from the team: One shall lead the discussion and present the questions; the second shall record the salient points of the discussions. One assistant can help in the distribution and collection of sheets of paper.

Steps in Conducting the FGD:

### Introduction (10 minutes)

Opening Statement—To clarify member roles and group objectives. It should include the following:

* A warm welcome
* A statement of the importance of the task
* A mention of the importance of each group member’s contribution
* An indication of how the group’s output will be used

### Conduct of the session (60 minutes)

* The moderator will present the question.
* The moderator will ask everyone to speak about the topic.
* Each person in the group should speak.

### Recording of the salient points

* The moderator will record the FGD using an audio recording device.
* The moderator must also document salient points from the discussion in a notebook.

### Concluding the FGD

The moderator must thank all the participants and seek parting feedback, if any.

Suggestive Questionnaire for FGD in Needs Assessment:

### Engagement questions

1. Do you see a role for the private sector in TB care and prevention?
2. What constitutes the private sector in your district and how could various private sector actors contribute more effectively to TB care and prevention?

### Exploration questions

1. How is the private sector engaged for TB activities in your district?
2. How is civil society engaged for TB activities in your district?
3. What is the mechanism and frequency of meetings with these private sector and civil society actors in your district? How is the feedback mutually utilized in the district?
4. What are the different partnership options being run in your district for TB?
5. How are these partnership options being organized in your district?
6. What are the roles and responsibilities of the State TB Cell and District TB Cell in making the partnerships functional?
7. What are the major challenges of partnership options in your district and how are these addressed?
8. How are the partnerships reviewed in the district and what is the frequency of the same?
9. What is the scope for new partnership options in your district?
10. What are the service delivery gaps in the current mechanisms?
11. What are the areas of service delivery to TB patients that require further improvement?

### Exit questions.

1. Do you have any parting feedback on partnership options and private sector engagement in your district?

## Annex 4. Analysis report template on systemic/programmatic gaps

**Summary Table:**

|  |  |  |
| --- | --- | --- |
| **District** | **Systemic gaps** | **Program gaps** |
| **District Name** | **Sample Text:** STS tablets are not functional, Unavailability of INH & FDC, requirement of microscope, 1 STS & STLS position vacant for more than a year. | **Sample Text:** Presumptive TB examination, LTBI test not available, Unavailability of medication adherence monitoring system, Agency support required in sample transportation instead of human carrier |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Reporting Framework: Logistics and Supply chain of drugs/diagnostics/consumables/equipment | | | | | | | |
| Name | Date of last 3 indents | Date of receipt of last 3 indents | Quantity ordered | Quantity received | Stock in hand (current) | Any drugs/ consumables procured from local market | Critical Findings and Observations |
| Drugs |  |  |  |  |  |  |  |
| Diagnostics |  |  |  |  |  |  |  |
| Consumable |  |  |  |  |  |  |  |
| Equipment's |  |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reporting Framework: Infrastructure | | | | |
| Type | Sanctioned | Availability | Functional Status | Critical Findings and Observations |
| Infrastructure Name 1 |  |  |  |  |
| Infrastructure Name 2 |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reporting Framework: Human Resource | | | | | |
| Type of the HR | Sanctioned | Filled | Status (Regular/ Ad hoc) | Training Status | Critical Findings and Observations |
| HR 1 |  |  |  |  |  |
| HR 2 |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reporting Framework: Presumptive TB examination | | | | | |
| Name of the Facility | Availability of Trained Medical Doctor (Yes/No) | Total OPD referral for presumptive TB examination | Presumptive TB examination rate | Availability of Microscopy (Yes/No) | Critical Findings and Observations |
| Facility 1 |  |  |  |  |  |
| Facility 2 |  |  |  |  |  |
| Facility 3 |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Reporting Framework: Testing | | | | | | |
| Name of Tests | Total tests conducted (during last 3 months) | Availability of specimen management system? (Yes/No)  (Yes/No) | TAT for sample collection to test result (Days)  (End-to-end TAT) | Test not conducted in last 3 months?  (Yes/No) | Service Outsourced?  (Yes/No) | Critical Findings and Observations |
| LTBI |  |  |  |  |  |  |
| Microscopy |  |  |  |  |  |  |
| Molecular tests |  |  |  |  |  |  |
| HIV |  |  |  |  |  |  |
| DST |  |  |  |  |  |  |
| X-Ray |  |  |  |  |  |  |
| Other Tests… |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Reporting Framework: Screening for LTBI | | | | | | |
| Name of the Screening Tool | Availability of Screening tool for LTBI ? (Yes/No) | Availability of Trained HR? (Yes/No) | Availability of specimen management system? (Yes/No) | Screening service not available for more than 3 months?  (Yes/No) | Service outsourced?  (Yes/No) | Critical Findings and Observations |
| IGRA |  |  |  |  |  |  |
| CTB |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Reporting Framework: NPY | | | | | | |
| District | Proportion of patients received benefits of NPY? | Proportion of Bank A/c linked | Responsible staff and Availability  (Staff type/Yes/No) | Average time to process all benefits for TB notified cases  (Days) | Any agency engaged?  (Yes/ No) | Critical Findings and Observations |
| XYZ |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Reporting Framework: TPT | | | | | | | | |
| District | Proportion of HHCs approached | Proportion of HHCs tested for LTBI | Availability of LTBI services (Yes/No) | Name of LTBI testing service available | Availability of TPT services  (Yes/No) | TPT not available since last 3 months (Yes/No) | Service Outsourced?  (Yes/No) | Critical Findings and Observations |
| XYZ |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Reporting Framework: TPT | | | | | | | | |
| District | Proportion of HHCs approached | Proportion of HHCs tested for LTBI | Availability of LTBI services (Yes/No) | Name of LTBI testing service available | Availability of TPT services  (Yes/No) | TPT not available since last 3 months (Yes/No) | Service Outsourced?  (Yes/No) | Critical Findings and Observations |
| XYZ |  |  |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reporting Framework: ACSM | | | | |
| Activities under ACSM | Any agency Outsourced? | Conducted in FY (22-23)? (Yes/No) | No of times held  (If Yes) | Critical Findings and Observations |
| Patient Provider Meetings |  |  |  |  |
| Community Meetings |  |  |  |  |
| School-based activities |  |  |  |  |
| Sensitization of PPs, NGOs, PRIs, Others |  |  |  |  |
| Outdoor Publicity |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Reporting Framework: Vulnerability Mapping and ACF | | | | | | |
| District | ACF conducted  (Yes/No) | Availability of recording formats and IEC materials (Yes/No) | Training on ACF (Yes/No) | HR for data entry and analysis (Yes/No) | Any agency outsourced?  (Yes/No) | Critical Findings and Observations |
| XYZ |  |  |  |  |  |  |

**Reporting Framework: HR Position Sanctioned and Filled**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Name of District | District TB Officers | | District Program Coordinator | | MO – DTC | | MO-TC | | Senior DR TB – TBHIVsupervisor | | District PPM Coordinator | | Accountant | | Senior Treatment Supervisor (STS) | | Senior TB Lab Supervisor (STLS) | | Lab. Techs. (LT) – RNTCP Contractual | | MO – PHI | | TBHV | | TBHV-Medical College | | LT – DMC (All sources) | | MO – Medical College | | LT – Medical College | | Data Entry Operator | |
| **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** | **Sanctioned** | **In Place** |
| 1 | **District 1** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | **District 2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Reporting Framework: NAAT Testing Gap**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.No. | State/District | Requirement | | | | | Capacity | | | | | | | | | | | Gap | |
| **Population (PCA 2011)** | **PTER (Presumptive Cases per 1 lakh population in 2022)** | **Test to be conducted - 1 (Population \* PTER/100000)** | **Notifications (2022)** | **Tests To be conducted - 2 (Notifications \* 12.5)** | **Number of CBNAAT Machines** | **Tests per day per machine** | **Max Test per day** | **Working days** | **Max Tests per year (CBNAAT)** | **Number of TRUENAT Machines** | **Tests per day per machine** | **Max Test per day** | **Working days** | **Max Tests per year (TrueNAT)** | **Total Testing Capacity** | **Gap 1** | **Gap 2** |
| 1 | **State** | **41974218** | **362** | **151812** | **60409** | **755113** | **48** | **12** | **576** | **300** | **172800** | **190** | **8** | **1520** | **300** | **456000** | **628800** | **476988** | **-126313** |
| 2 | District 1 | 1273821 | 49 | 625 | 1402 | 17525 | 1 | 12 | 12 | 300 | 3600 | 3 | 8 | 24 | 300 | 7200 | 10800 | 10175 | -6725 |
| 3 | District 2 | 1648997 | 10 | 161 | 1958 | 24475 | 1 | 12 | 12 | 300 | 3600 | 5 | 8 | 40 | 300 | 12000 | 15600 | 15439 | -8875 |

**Reporting Framework: Training Needs**

|  |  |
| --- | --- |
| District | Training Needs |
| District 1 | Sample Text: STS Refresher training, Nikshay, Private Sector Engagement |
| District 2 | Sample Text: PMDT, Nikshay, TPT, ACSM |

## Annex 5. Gap Score Calculation – Delhi Model

Refer to the MS Excel Sheet—"Need Assessment Score Calculation Delhi Model”

1. Total scores are based on gaps in the indicators over five consecutive years.
2. Given the high presence of private sector providers in Delhi, data is disaggregated by public and private sectors to calculate the achievement for the identified indicators and the overall achievement score.
3. Scoring:

* Achievement of >=100% of targets is rounded down to 100% achievement when analyzing the data for simplicity.
* % scores of all indicators are converted to a range of 0 to 1; e.g., if the notification achievement of a particular district and year is 71%, then the score is calculated as 0.71.
* After calculating the score of each district for each of the previous five years, a final score based on the average is calculated.
* The highest possible score for each indicator is 1 and the highest possible combined score for all Ni-kshay key performance indicators in both the public and private sectors is 5.
* Districts were ranked based on the average score for all key performance indicators, with a total score of 5 for both the public and private sectors.

1. Steps for the Delhi Model:
2. Download the relevant indicator data for the last 5 years from Ni-kshay – additional details on data sources and downloading criteria are included in the excel file instructions.
3. In the “Notification” worksheet, copy in the notification targets for the private and public sectors in columns C to L. Note that only cells in light green require data entry.
4. In the “Notification” worksheet, copy in notifications reported in the private and public sectors from Ni-kshay in columns R to AA.
5. The gap scores will be auto calculated. The final score for notifications is reported in Column CB (total for both sectors; final scores for private-only and public-only are in columns AV and BL, respectively). Note that the light grey color-shaded cells in the worksheet have formulas and will auto-populate.
6. Repeat steps 2-4 for each of the other indicators in their corresponding worksheets. Note that the final score for all indicators other than notifications can be found in column BM
7. The worksheets “Final Score\_Private” and “Final Score\_Public” auto-calculate the respective composite scores for the private sector and public sector in each of the districts.
8. The composite score combining the private and public sectors together auto-calculates in the worksheet titled “Final Score\_All”.
9. Use the worksheet titled “Final Score\_All” to identify the major programmatic gaps to inform potential partnership options.
10. Suggested Partnership Options for Delhi were identified based on the private and total (private and public) gap scores.

## Annex 6. A case study of a private sector needs assessment for partnership contracts conducted in Odisha State

### Background:

Below is a summary of the approach and findings from a needs assessment conducted by HS4TB in Odisha State in 2023. This case study is intended to be an example containing practical guidance on how to implement a needs assessment.

### Activity Plan and Timeline:

|  |  |  |  |
| --- | --- | --- | --- |
| Activities | Modes of implementation/ Data sources | Key output of the activity | Timeline and official communication |
| Finalized methodology, objectives, and study design | Desk work | Assessment framework | Finalization of framework internally by the last week of March 2023 |
| Shared assessment framework with STO for feedback and finalization | Virtual communication with STO | Assessment framework | Email communication with STO on April 6, 2023 |
| Review of performance indicators (e.g., notifications, microbiological confirmation, DST, HIV testing, treatment outcomes, etc.) | Desk review of Ni-kshay data | Spreadsheets of different indicators | Desk review completed by the last week of March 2023 |
| Analyzed data and identified gaps (e.g.: inputs/activities/processes) | Desk review | Secondary data analysis report |
| Designed tool for primary data collection | Desk work | Assessment tool | Primary data collection tools were made ready by March 2023 |
| Visited districts to identify systemic/programmatic gaps through primary data collection | Interview Tool | Analysis Report | Visited to districts from May 9 to May 17, 2023 |
| Compiled list of all gaps and proposed solutions | Content analysis | Recommended partnerships | Email communication with STO on June 15, 2023 |
| Communicated the findings with state authorities | Meeting | Disseminated needs assessment findings for inclusion in PIP |
| Share the details of partnership option to be included in PIP with justification | Formal communications | PIP allocation | Shared with STO over mail on Aug. 7, 2023 |

### Suggested Partnership Options Based on Needs Assessment:

|  |  |  |  |
| --- | --- | --- | --- |
| District | Suggestive partnership options | District | Suggestive partnership options |
| **Cuttack** | PHA, Diagnostics, Treatment Services | **Bargarh** | PPSA, Diagnostics, ACF |
| **Balangir** | PHA, Diagnostics, Treatment Services | **Kendujhar** | PHA, Diagnostics, Treatment Services |
| **Balasore** | PPSA, ACSM, ACF | **Kalahandi** | PPSA, Diagnostics, Treatment Services |
| **Ganjam** | PHA, Drug Access and Delivery, Treatment Services | **Koraput** | Specimen Management, Diagnostics, Treatment Services |
| **Sundargarh** | ACF, ACSM, Specimen Management | **Mayurbhanj** | Diagnostics |
| **Samablpur** | Diagnostics, ACSM, Specimen Management | **Nayagarh** | Treatment Services |
| **BBSR MC** | Diagnostics, ACF, PHA | **Rayagada** | PPSA, ACSM, ACF |
| **Jajpur** | PHA, Treatment Services, PPSA | **Nabrangpur** | Specimen Management, Diagnostics |
| **Khorda** | Diagnostics, ACF and TB Prevention | **Bhadrak** | PPSA, PHA |
| Of the 31 districts in the state, 4 districts were visited in-person, 14 were approached by phone, and 13 were excluded due to very low private sector presence and private sector TB notifications. The overall state health budget was reduced by ~30% leading to a significant cut to the available budget in the PIP and unfortunately the non-PPSA partnership options listed above did not get funded.    **Of the above options, the following was chosen per state needs: PROPSOSAL OF A PPSA IN BALASORE DISTRICT WITH ESTIMATED BUDGET:** | | | |
| **Budget Estimation and Justification:**  Currently, PPSAs are operating across 7 NTEP districts of Odisha with average rate of Rs. 2,871 per TB Notification.  The rate is not the same for all the implementing districts, as different agencies are operating at different rates in the districts (see the table below):   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | C1 | C2 | C3 | C4 | C5 | C6 | | **State/District** | **Contract Rate** | **TB Notification Target** | **Contract Value (C2\*C3)** | **PIP Allocation (2871 STATE AVG \*C3)** | **Difference (C4-C3)** | | **Mayurbhanj** | 1989 | 1000 | 1988810 | 2871000 | 881510 | | **Sundargarh** | 2052 | 846 | 1736068 | 2428866 | 692459 | | **Sambalpur** | 4608 | 500 | 2304000 | 1435500 | -868745 | | **Khorda** | 2859 | 700 | 2001300 | 2009700 | 8057 | | **Cuttack** | 2860 | 1100 | 3146000 | 3158100 | 11561 | | **Bhubaneswar** | 2859 | 1100 | 3144900 | 3158100 | 12661 | | **Ganjam** | 2860 | 1300 | 3718000 | 3732300 | 13663 | | **AVERAGE** | **2871** |  |  | **SURPLUS** | 751,166 |   With a total target of 8,000 TB notifications (proposed in PIP), the surplus of approximately 7.5 lakhs from unutilized funds in the PIP can be used to operationalize PPSA in one more district with an addition of Rs. 8-9 lakhs to the existing allocation for PPSA.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | C1 | C2 | C3 | C4 | C5 | C6 | | **State/District** | **Contract Rate** | **TB Notification Target** | **Contract Value** | **Contract Allocation Needed** | **Shortfall** | | **Odisha** | 2871 | 8000 | 14321078 | 2296800 | 8646922 |   \*The rates are likely to change in FY 2024-26 based on new contracts  **Proposed new district with justification:**  Based on the needs assessment conducted in May 2023, Balasore District has been proposed for a PPSA with the following justification.   * The district is consistently reporting more than 300 notifications in the private sector. However, taking into consideration the National TB Prevalence Survey, the district has the potential to report more cases. With a population of more than 23 lakhs with prevalence of 248 cases per 100,000 (including the pediatric population), the district should have an estimated 5,704 cases to report in total, and if 10% is assumed from the private sector, that equates to around 550 cases expected in the private sector. * High urban population * With 550 cases, there is a business case for an agency to start PPSA operations in the district * Significant private sector presence, including the pulmonologists, with 46 active providers. * Presence of medical college. | | | |

About HS4TB

The USAID Health Systems for Tuberculosis (HS4TB) project seeks to transform the way country leaders and health system managers understand and work toward TB control and elimination. HS4TB is a five-year USAID contract focusing on health systems priorities that most directly support achievement of TB outcomes, with a focus on health financing and governance in the USAID TB priority countries. The project helps countries increase domestic financing, use key TB resources more efficiently, build in-country technical and managerial competence and leadership, and support policy formation and dissemination. HS4TB is led by Management Sciences for Health (MSH) in partnership Open Development.

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