Recording & Reporting

Maintenance of accurate records and registers of patients and programme activities; and reporting data to the state/central unit, is essential for proper monitoring and management of Revised National Tuberculosis Control Programme (RNTCP). RNTCP records and reports are standardized and provide the required information for managing the programme effectively
The following standardized records are used in the RNTCP

Forms	Registers
Referral Slip	Tuberculosis Laboratory Register
Laboratory request Form for Specimen Examination	Culture and DST Laboratory Register
Tuberculosis Treatment Card	Tuberculosis Notification Register
DR-TB Treatment Card	Second line TB treatment register
Patient's TB Identity Card	Stock Register
DR-TB patient identity card	Reconstitution Register
Referral form for treatment	
Referral form for treatment of DR-TB	
Transfer Form	

RNTCP request form for examination of biological specimen for TB (Annexure 15A)

The request form is kept at all the PHIs. It is filled generally by the MO of the referring health facility. This form is used for microscopy or CBNAAT or culture DST or Chest X-Ray or TST. Only one form is filled for each patient. Patient will report to the diagnostic health facility along with the request form. In case PHI is a sputum collection centre, sputum samples are sent to the diagnostic facility along with the request form. It is essential to record patient details, reason for testing and type of test requested. The same form is sent back to the treating unit with the results. When this format is used for C&DST, a copy of this form will be sent electronically to lab and DTC. In turn, the laboratory will send the result in electronic copy back to district with copy to DR-TB centre.

RNTCP referral slip (Annexure 15B)

The referral slips are used by peripheral health workers like ASHA, AWW, Link Workers etc. to refer patients to health facilities where specimen is collected either for examination or for transportation. This referral slip has contact details and symptoms of patient. At these health facilities, RNTCP request form for examination of biological specimen for TB is filled up by Medical Officer. (While printing Referral Slips, printing of Serial Number may be considered)

Tuberculosis Treatment Card (Annexure 15C)

Treatment card is filled at the PHI when patient is initiated on treatment. This card contains important information about a patient, such as: Name, age, sex and address of the patient; Type of disease; history of anti-TBtreatment; Regimen prescribed; Duration of treatment; Amount of drugs to be given; Results of investigation before and during treatment; Drugs administered during the intensive and continuation phases of treatment; Treatment outcome of the patient; Retrieval actions for missing doses; Adverse event, Preventive treatment for children; details of X-ray or other tests for diagnosis of EP TB; information on TB comorbidity and Remarks. It also has information on the treatment supporter, person conducting the initial home visit and the signature of the MO. An additional treatment card should be kept, if treatment supporter is not at health facility. In such cases, treatment supporter should be trained on recording treatment card.

Patient's TB Identity Card (Annexure 15D)

Identity card is completed for each patient who has a Tuberculosis Treatment Card. It is kept with the patient. Information from the Tuberculosis Treatment Card is used to complete the identity card. The front part of the ID card has patient information, name and address of the TU/ district and treatment details of patient including disease classification, type of patient, weight bands, smear results, category and information on the date of starting treatment. The back portion of the ID card has the results of follow-up smear examination, appointment dates for visits for drug administration and treatment outcome. This information will help to continue treatment in case the patient is transferred, or admitted to any other health facility anytime during the treatment period.

RNTCP PMDT Treatment Card (Annexure 15E)

This card is a key instrument for the treatment supporter administrating drugs daily to the patient. The card will be initiated at the DR-TB Centre when the patient is admitted for staring treatment. However for those patients who are not willing for admission the card will be initiated by the DTO. The card should be updated daily, ticking off the administration of drugs by the treatment supporter. The card is the source to complete and periodically update the PMDT register. The original treatment card will be maintained at the DR-TB Centre and a copy will be kept at treatment supporter. Accountable systems have to be developed locally for updating cards at all levels. When or if the patient moves from the DR-TB Centre to his/her district of residence a copy of the card, must follow the patient. A copy of this card may be used as a notification form and to inform about final outcome of treatment.

RNTCP PMDT Patient Identity Card (Annexure 15F)

When a patient is diagnosed as having DR-TB and is placed on a Regimen for DR TB, RNTCP PMDT patient identity card should be filled out by the health care provider at the same time that the treatment card is filled out. The card should be kept by the patient. The card, which is wallet-sized, contains the name, age, sex, PMDT TB number, essential information about the treatment (start date, regimen, and severe adverse reactions to drugs), and the details of the health centre and treatment supporter where the patient will receive treatment. Mention date of missed doses and date and result of all follow up cultures in the space under Intensive and Continuation Phase. It also has a place to write the date of the next appointment for follow up at DTC and the DR-TB Centre.

Referral/Transfer form for treatment (Annexure 15G)

Referral / Transfer form for treatment is kept at all health facilities. Medical officer of the diagnostic health facility which refers patients for treatment to other peripheral health facilities needs to fills in the top half of the form which includes the patient characteristics. Once the patient arrives, the receiving unit fills in the bottom half of the form, and sends it back to the referring unit. Information regarding referral of patient should also be noted in the TB notification register.

Referral / Transfer form is to be used when transferring registered patients on treatment from one reporting unit to another. If a patient is being 'Transferred Out', a Referral / Transfer Form and a copy of the Tuberculosis Treatment Card will be sent from the “transferring unit”, i.e.,referring health facility / TU to the “receiving unit”, i.e., health facility/ TU where the patient will receive further treatment. The first part of the form contains information about the patient, her/hisdisease, treatment details and address of the transferring unit. This information should be used to complete a new Tuberculosis Treatment Card for the patient, who would be re-registered as a “transfer in” case in the receiving unit. When the patient has reported to the receiving unit, the bottom part of the form is completed by the receiving unit and returned to the transferring unit. It is to communicate patients' follow up examination results at the end of intensive phase and treatment outcome to the transferring unit.

RNTCP PMDT Referral for Treatment Form(Annexure 15H)

This form has to be filled for all confirmed MDR or XDR TB cases that are referred from one centre to another centre. The form has to be filled by the doctor of the referring centre in duplicate and one copy sent along with the copy of the current treatment card to the referred centre. This form can be used for referring the patient at various points in time during the management of the patient between the PHI, DTC and DR-TB Centre for reasons like initiation of treatment, adverse drug reaction, transfer out, ambulatory treatment or any other reason. Incases that are transferred out, a copy of the updated PMDT treatment card must also be sent along with the referral for treatment form.

TB Notification register(Annexure 15I)

A TB notification register is maintained at each peripheral health facility. This register contains records of all patients diagnosed with TB and eligible for TB treatment, regardless of initiation of treatment. It will also incorporate those cases initiated on first line treatment and offered drug susceptibility testing and results are awaited. The registration data is based on the date on which a TB patient is diagnosed.

If patient is put on treatment in area of facility where s/he is diagnosed then information on treatment and follow up is recorded in the same TB notification register. If patient is treated in area other than where h/she is diagnosed then information on treatment and follow up is recorded in TB notification register of health facility where patients is residing.

In each health facility, TB notification register is maintained by its staff. STS of the respective TB units will support updation and coordination for completing the information.

For every patient, status of treatment should be recorded. The status of treatment for any patient would one of the following:

1. Initiated on First line treatment in the same Health Facility
2. Initiated on second line treatment in the same Health Facility
3. Initiated on treatment outside Health Facility
4. Treatment initiated outside RNTCP
5. Incomplete/ incorrect address
6. Died
7. Migrated & untraceable
8. Repeat diagnosis
9. Patient already on treatment/ Follow up patient
10. Wrong diagnosis
11. Referred for treatment with pending feedback
12. Other

RNTCP PMDT Treatment Register(Annexure 15J)

This register is maintained at DR-TB centre and at the district TB centre. In contrast to the TB notification register, it is restricted to patients who have actually started on a second-line TB treatment regimen. Date of registration will be date on which a patient is initiated on second-line treatment. The patients should be entered consecutively by their date of registration.

At DR-TB Centre, Medical Officer DR-TB centre will be responsible for maintaining the register. Statistical assistant will assist in updating it in consultation with districts and CDST laboratory. For patients who are unwilling for admission at the DR-TB Centre and are initiated on treatment at the DTC, the DTO will send the requisite information to the DR-TB Centre along with a copyof the treatment card. The DR-TB Centre will register the patient and communicate the PMDTTB number to the DTO electronically.

At district level, DR-TB supervisor will be responsible for maintaining and updating the register. In district level DR-TB register, every patient residing from the respective district and registered on treatment at DR-TB Centre will be registered using the PMDT TB number given from the concerned DR-TB Centre.

Tuberculosis Laboratory Register(Annexure 15K)

It is kept at all designated microscopy centres. The Tuberculosis Laboratory Register is used to record the results of smear examinations. The LT assigns a Laboratory Serial Number for each patient who has been referred to the Laboratory for microscopy. The TB laboratory register is used to record date of specimen collection, patient information including contact details, Name of the health facility that requested the examination (e.g. primary health centre, medical college, private practitioner, NGO, etc.); Reason for examination (diagnosis and follow-up); Results of smear examinations; information on testing for comorbidity and drug sensitivity and treatment initiation status and notification number. The last two columns of the register are for the LTs signature and any remarks the LT or supervisor wishes to make. The remarks column can mention in brief the action taken for patients belonging to other TU/districts, e.g., “Referred for treatment to…” The laboratory technician should summarize the information on sputum smear examinations done during that month. This information should be summarized in the format at the end of each month, printed in the Laboratory Register itself. Patients from the following month should be started from the next new page.

Culture and DST Register (Annexure 15L)

The RNTCP laboratory register for Culture and DST is used to record CBNAAT, LPA and culture and DST examination results. This register should be compared regularly with the RNTCP PMDT register to ensure that all DR-TB cases to be started on RNTCP Regimen for DR TB are entered in the PMDT register to ensure each case diagnosed is accounted for monitoring indicators and report generation. The lab NIKSHAY ID number is a unique number, given to a patient first time his/her specimen comes the lab. On all subsequent specimen sent to the lab, the same NIKSHAY ID number is retained for the patient, but the new specimen is provided with a new lab number. This gives an opportunity to easily extract the test results of all the specimen provided by the patient and there by track his/her response to the treatment.

Stock Register

This register is maintained at state/ district/ TU drug store. It is used for recording information on stock of drugs and consumables received and issued by the health unit. The register also mentions the batch numbers and date of expiry ofdrugs and consumables. The reconstituted PWBs should be recorded in the DTC stock register as receipts. The format of the register can be referred to in the Standard Operating Procedures Manual for State Drug Stores'.

Reconstitution Register

It is maintained at all the DTCs for recording the receipt of drugs of patients who have defaulted, died, failed treatment or transferred out. Such drug boxes are reconstituted and the details thereof are also recorded in the register. The format of the register can be referred to in the 'Standard Operating Procedures Manual for State Drug Stores

Supervision, Monitoring & Evaluation

RNTCP has a robust recording and reporting system in place along with multiple internal/external checks to ensure good quality data generation which forms the basis for existing RNTCP supervision and monitoring strategy.

However, in view of the expansion in program activities this strategy needs to be more comprehensive with transition from target-focused monitoring of performance to analysis of key process and outcome indicators. Establishing a reliable monitoring and evaluation system with regular communication between the central and peripheral levels of the health system is vital. This requires standardized recording of individual patient data, including information on treatment outcomes, which are then used to programme monitoring indicators in cohorts of patients.

The strong supervision, monitoring and evaluation ensure that activities are implemented as planned, and that the data recorded and reported is accurate and valid; incorporate a system which leads to remedial action to improve performance; serve as a tool to facilitate commitment of higher authorities at different levels, ensure equitable provision of services to all sections of the community, including vulnerable areas and populations such as urban slums, SC/tribal/minority pockets etc.; and above all, bring the transparency and accountability.

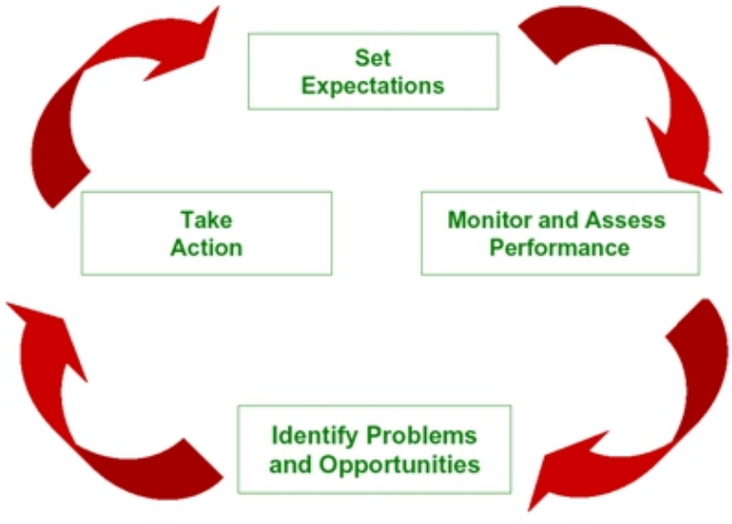
Program Supervision

Supervision is a systematic process for increasing efficiency of the health personnel by developing their knowledge, perfecting their skills, improving their attitudes towards their work and increasing their motivation. It is thus an extension of training.

Supervision is carried out in direct contact with the health personnel. It is a two-way communication between supervisors and those being supervised. It should not be a fault finding exercise but a collaborative effort to identify problems and find solutions.

It must also be realized that health personnel at all levels need on going support for solving problems and to overcome difficulties. They also need constructive feedback on their performance and continuous encouragement in their work. Such a supportive supervision ensures smooth implementation and continuous program improvement.

Process of Supervision



Guiding Principles for supportive supervision:

- Focus on processes and systems
- Nurture effective communication with staff
- Resolving conflicts
- Involvement and ownership-of supervisor and those supervised.
- Efficiency and delivery should be the target oriented
- Continuous learning, development, and capacity building of those supervised
- *Reinforcement on quality health outcomes at all levels*

Preparation for supervisory visit

1. Review of previous reports

Prior to undertaking the supervisory visit, monthly & quarterly reports and findings and recommendations of previous supervisory visit(s) are to be reviewed.

2. Prioritization of sites

Based on the data from above mentioned sources, it is important to prioritize on the sites to be visited and the key items to focus on during the supervisory visit.

There is a need to visit different types of health facilities at required intervals; some sites need more supervisory support than others. However a decision on this is based on certain performance indicators derived from various records and reports.

3. Preparation of Tour Programme

The visiting team has to prepare the travel plan well in advance to ensure availability of all concerned members of the supervisory team.

4. Intimation of tour programme to the Health Centre

It is always advisable to notify the in-charge of the health facility about the proposed visit so that the presence of the field staff can be ensured during the visit.

Occasionally, supervision can also be undertaken on a surprise visit to find out the factual situation.

5. Prepare objectives of supervisory visit

Objective of supervisory visit should be prepared in advance and should be shared with the supervisory team. The output of the supervisory visit will be to achieve those objectives in form of identification of reasons of the issues and solutions to address those issues and not merely fault finding. Since it may not be possible to evaluate all the activities on a single visit, it is important for the supervisory team to prepare their own objectives in continuation with observations made during earlier visits. Review of previous reports is useful for identifying the priority areas to be focused during the supervision.

6. *Supervisory Team:*

Supervisory team should possess a mix of skills and competencies keeping in mind the key areas and the sites to be visited.

CONDUCTING SUPERVISION

The supportive supervision approach should emphasize on constructive feedback, joint problem solving, and two-way communication between supervisors and those being supervised.

There are several ways in which the information could be obtained during the visit. Identified priority areas will require a mix of approaches, some of which are mentioned below:-

1. Discussion with Medical Officers and health workers

The knowledge and practices of the medical officers and health staff regarding their tasks is to be assessed during the discussion. Inadequacies observed during such interactions may be resolved by mutual consultation. Good work done by the health staff should always be acknowledged .

2. Review of records

Efficiency of the performance can also be assessed through review of important documents. Records that should be reviewed include:

- Lab register
- Treatment cards
- Register for drugs and consumables
- TB notification register

The information entered in more than one record is compared and checked for consistency. For example, the results of sputum examination are entered in lab register, treatment card and TB notification register. Random checking of such information in various records should be done to ensure consistency. Any inconsistencies that are observed should be discussed with the concerned personnel. Good record keeping practices should be appreciated.

The following records and reports are cross-checked for consistency:

- TB notification register, lab register and treatment cards
- monthly PHI-level report and lab register
- monthly PHI report and register for drugs and consumables
- monitoring indicators and TB notification registers

1. OBSERVATION

a) Observation of activities

On-site observation of various programme activities during their actual performance is one of the most effective tools for supervision. The activities at DMCs and DOT centers may be observed closely to assess the adherence to the programme guidelines. Immediate feedback should be provided on the work performed. While the correct practices should be acknowledged, any deviations observed should be communicated with the intention of improving systems and processes rather than targeting the individual.

b) Observation of Interaction between health staff and patients

Observing interactions between MO/Health staff and patients is crucial for understanding how the programme is functioning and the areas that require improvement.

At Health Centre:

Observing the interactions during various activities like sputum collection, DOT, health education, etc. will help the supervisor to understand the information provided to the patients and the manner in which it is provided.

The supervisory team should take note of the following:

- Health staff behaves politely with the patients.
- The health education messages conveyed should be simple and clear.
- Instructions to the patients are communicated clearly to the patients for example, correct way of bringing out sputum, adherence to treatment regularity, cough hygiene, etc..

Home visit: Interaction with the patients and their families is crucial to gauge patient's understanding of the disease he/she is suffering from and the course of treatment to be followed. This also provides an indication of the quality of health service delivery. Selection of patients to be visited at their home will be at the discretion of the supervisory team. However, smear positive patients and patients who have interrupted the treatment should be given preference.. It would be preferable if the In-charge of the health facility accompany the team during home visit. Feedback on the observations made during the supervisory visit should be provided to the concerned health staff. Information obtained during the patient interview should be cross-checked with the available records.

2. Examination of supplies

The following items are to be checked to assess the adequacy:

Drugs	Laboratory forms for sputum examination
Needles and needle cutters	Tuberculosis Treatment Cards
Syringes	Tuberculosis Identity Cards
Ampoules of water for injections	Tuberculosis Transfer Forms
Sputum containers	Referral for Treatment forms
Laboratory consumables	Supervisory Register

Equipments are checked for their functional status. Reagents are checked for date of preparation and expiry. Patient-wise boxes are also checked. It is to be ensured that drugs and reagents with earlier expiry date are used before the stock with later expiry date. Drugs or consumables should not be kept beyond their date of expiry. During supervisory visits, unused portions of patient-wise boxes of patients who have defaulted, died or transferred out are to be taken back to DTC. The partially consumed boxes are not to be re-used for any other patient, as this may result in incomplete treatment. However the unused blister packs will be used for reconstitution at DTC.

The stock of drugs and lab consumable is cross-checked with monthly PHI- reports and registers, followed by physical verification of the existing stock.

Recording feedback on supervision

Observations and recommendations arrived at during the supervision should be entered in the register meant for supervision. Besides, a report on feedback of supervision should be sent promptly to the health centre visited for corrective actions. Higher authorities may be furnished with a brief report for any administrative intervention if needed. Feedback and problem solving are key to effective supervisory activity.

Problem solving

Problem solving is one of the important objectives of supervision. The process begins with description of the problem identified and then, possible causes are identified. Subsequently, solutions are identified and implemented. The problems identified and the possible solutions could be discussed as a team. The steps mentioned above may be followed during the discussion.

Supervisory Protocols

1. RNTCP Supervisory staff protocol for district level category of Staff

Supervisor	Methodology	Frequency
DTO/MO – DTC	• Conduct interview with health staff and RNTCP key staff and other sectors • Conduct interview with health staff of Private/NGO hospitals • Interact with community and local opinion leaders • Randomly interview patients and community leaders. • Inspect records of the TU, PHC and CHC, and stock of anti-TB drugs and laboratory consumables. • Randomly check the microscopy centre and DOT Centers	Visit all TUs every month and all DMCs every quarter. Visit all CHCs and Block PHCs in the district every quarter, one sub-centre from each Block PHC area and a proportion of treatment observation centres every quarter. Conduct supervisory visit at least 3-5 days a week. Visit at least three patients at their homes per visit Visit prioritized private/NGO and other sector health care centres.
District PMDT TB-HIV coordinator	• Interview MPHS and MPWs at the PHC sub-centre. • Inspect records, PMDT Treatment Cards and PMDT Treatment Register. • Visit PMDT treatment observation centres and interview the treatment supporters • Randomly interview DR-TB patients and PLHIV with TB. • Inspect records, line list of presumptive TB referral at ICTC and ART centres, and HIV-TB register at ART centres • Interview health staff of identified Private/NGO/other sector health care centres	Visit DR-TB centres at every month and attend every coordination meeting at DR-TB centres Visit all TB Units once every quarter. Visit all sputum collection centres at least once a quarter. Visit all CBNAAT laboratories once in a month. Visit all DR-TB patients at their home within one month of treatment initiation. Visit all ART/Linked ART centres in a month Visit all ICTCs in a quarter Visit 3 HIV-TB patients during each visit Visit prioritized private/NGO and other sector health care centres.
District PPM Coordinator	• Interview health staff of identified Private/NGO/other sector health care centres • Inspect records, notification registers at private health facility, other records as prescribed for relevant services. • Randomly interview patients treated in private.	Visit prioritized private practitioners in a month Visit prioritized private hospitals in a month Visit prioritized laboratories in a month Visit prioritized chemists in a month Visit prioritized NGOs in a month Visit prioritized coroporate sectors in a month

Supervisor	Methodology	Frequency
		Visit Public Sector Units Visit at patients treated in private at their homes during visit Visit patient provider meeting, community meeting, school activity, sensitization of PRI/ASHA, outdoor publicity.
MO-TC	• Interview the MO I/C Block PHC/CHC/PHC./Private/NGO hospitals • Randomly interview patients and community leaders. • Interact with community and local opinion leaders • Randomly check the microscopy centre and DOT Center • Stock of anti-tuberculosis drugs and laboratory consumables.	Visit all DMCs every month. Visit all CHCs/BPHCs/ PHCs and a proportion of treatment observation centres at least once every quarter. Conduct supervisory visits 7days a month. Visit at least three patients at their homes per visit. Visit prioritized private/NGO and other sector health care centres.
STS	• Interview MPHS and MPWs at the PHC sub-centre. • Inspect records, Tuberculosis Treatment Cards and Tuberculosis Notification Register. • Randomly interview patients. • Interview health staff of identified Private/NGO/other sector health care centres	Visit all PHIs at least once every month and all DOT centers once every quarter. Visit all TB patients at their home within one month of notification from both public sector and private sector. Conduct supervisory visits at least 5 days a week. Visit prioritized private/NGO and other sector health care centres.
STLS	• Inspect all microscopy centres, review laboratory records, check stocks, inspect sputum collection centres and PHIs including that of private/NGO and other sectors	Visit all microscopy centres and CBNAAT laboratories in the jurisdiction at least once a month. Visit all specimen collection centres at least once a month. Visit prioritized private/NGO and other sector health care centres.

PROGRAM MONITORING

Monitoring is the process of observing whether an activity or service is occurring as planned. It implies systematic and purposeful observation, aiming to identify any diversion from the planned course of action. It is a routine tracking of program using input, process, output and outcome data collected on a regular and ongoing basis.

This helps identify the need for more formal evaluation of activities and find timely solutions to the problems.

Monitoring in TB programs is of paramount importance for ongoing program planning and implementation. A good monitoring strategy moves beyond the widely used case detection and treatment outcome indicators and applies the concept of input, process, output, outcome and impact indicators for measurement of key program activities.

A. Monitoring Indicators:
Various components of programme service delivery are feed in NIKSHAY from where various input, process, and outcome indicators drawn for different levels of health facilities. Analysis of these indicators will help in monitoring improvement in program performance. List of monitoring indicators is placed at Annexure 16.

B. Review meeting Protocol
Review meetings are useful monitoring tools and effective use of the same helps ensure standard practices in the program and help improve performance. The table is placed in annexure17 for the different types of review meeting conducted under RNTCP. More focussed reviews of specific activities may be planned by the program managers.

Following aspects are crucial for effective review meetings:
- Organization at convenient place and time
- Timely communication of the schedule, to allow preparation by the participants
- Advance planning of agenda items and thorough preparation by the organizers
- Two-way communication between the chair and participants
- Encouragement for experience sharing on important discussion points
- Review must be based on objective indicators and not opinion
- Prompt decision making and initiation of action
- Systematic recording and dissemination of minutes of the meeting including time bound action points
- Tracking of actions taken on decisions made in the meeting at the level of Managers

C. Monitoring tools:
Monitoring tools should never be used in Isolation; together with Good Monitoring Indicators they form the basis for effective Program Monitoring. Refer to document on supervision and monitoring strategy under RNTCP.

Program Internal Evaluation

Internal Evaluation forms an integral component of RNTCP supervision and monitoring strategy. It acts as a tool to evaluate if good program practices are adopted and quality services are provided to the community. The evaluations also offer an opportunity for program managers to look into all aspects of program critically and swiftly. These activities help program managers in understanding determinants of good as well as poor performance for replication of good practices in other states /districts andtake appropriate measures for improvement.

Objectives of IE

1. To provide a systematic framework for **assessment** of program performance, financial & logistics management, recording and reporting, and quality of care received by patients
2. To give **recommendations** for improving the quality of program implementation and performance with a realistic action plan and time line.
3. To **monitor** efforts to improve and maintain program quality and performance over time

Centrally driven internal evaluation (CIE): Central TB division selects 1state per month for evaluation based on the performance so that all big states are visited once in every 2 years. In the selected state at least 2districts are evaluated. CIE provides an opportunity to review performance in select district and to review overall performance of the state, programmatic challenges. It facilitates the centre to understand, address and support actions for improving quality of RNTCP implementation in the state.

The CIE team consists of representatives from CTD, NACO, WHO, STO's from other state, partners and consultants etc.

State Internal Evaluation team consists of State TB Officer or Deputy STO, STDC Director / representative (where STDC exists), One DTO of a district other than the one being evaluated, WHO RNTCP consultants, Medical college representative, Consultant from other programme partners (IMA, CBCI etc.), State Accountant and State IEC Officer

IE Methodology

Selection of districts: Upto 30 million – 2 districts per quarter; 30-100million – 3 districts per quarter; >100 million – 3-4 districts per quarter.

Aim is to cover all districts at least once in 3-4 years. In States/UTs with 4 or lessdistricts, 1 district or TU per quarter may be evaluated alternating selectionbetween a well performing district and an under performing district.

Selection ofTB Units/ DMCs:

DMC are listed based on presumptive TB cases examined in previous quarter. Five DMCs are selected out of these as follows:

1. DMC at DTC
2. Two DMC that are examining higher number of presumptive TB case (preferably from different TU)
3. Fourth and fifth DMCs is selected randomly from remaining DMCs (preferably from different TU)

Selection of DOT Centres /Treatment support centres:

- The team should visit the DOT Centres attached to each of the 5 selected DMCs (and Medical College conveniently selected).

- Also identify and visit 5 more Treatment Support Centres in the district with unique characteristics such as those attached to a medical college (other than the one conveniently selected for visit), other sectors like ESI, Railways, NGOs, private sector, anganwadi worker, ASHA, community volunteer)

Selection of patients:

- In each of the **2 DMCs with low case load** 4 NSP patients are selected randomly and one previously treated case conveniently (5 X 2= 10 patients)
- In each of the **DMCs at DTC & 2 TU level DMC**, 4 NSP patients are selected randomly and 1 patient each of the types Relapse, TAD and Failure are conveniently selected. Also select 1 TB/HIV patient and 1 DR-TB patient (7 X 3 =21 + 3 +3= 27)
- Visit at least 2 pediatric TB patients undergoing treatment within the district. Thus a total of 36 to 39 patients should be interviewed in the district.

Activities performed in IE:

- Triangulation of data, for all the TB Units in the district
- Visits to DMC, Treatment Support Centre, ICTC, ART centre, Medical College etc. Patient home visit for interview
- Compilation of the report
- Communication of Key observations to district authorities
- De-briefing of the findings to RNTCP staff
- Submission of IE report to STC and CTD - soft copies are sent to CTD as soon as possible and the hard copies, with cover page signed by all members, by courier not later than a week.

RNTCP has made incredible progress with regards to ensuring quality diagnostic and treatment services, but therein lies the risk of complacency creeping into the program. Further the program has expanded to involve all health care providers thorough PPM strategy, TB HIV collaborative activities, provision of PMDT services etc. which may compromise the quality of basic DOT services. Therefore it is important to ensure that basic components of DOTS are in place and Internal Evaluations are useful tool for the same.

Internal Evaluation Formats and Internal Evaluation Field Visit Report – Refer to the strategy document on supervision and monitoring available at www.tbcindia.gov.in

Surveillance

Complete surveillance is an important public health function in the prevention and control of any disease. Prompt notification to the public health system is an important component of the surveillance process and achieves the following public health objectives:

- It provides helps to measure disease burden, monitor epidemiological trends, detect outbreaks, and plan and target preventative and treatment services.
- It identifies people needing follow-up to ensure that treatment is completed, and enables contact tracing and screening of close contacts.

Notification of TB patients

In order to undertake comprehensive surveillance of Tuberculosis, ensure quality of care, reduce TB transmission and address the problem of emergence of spread of drug resistant TB, it is essential to have complete information of all TB cases. Government of India has declared Tuberculosis a notifiable disease in May 2012. Henceforth, all health care providers in public and private sectors have the public health responsibility to notify TB cases diagnosed and/or treated by them.

All TB cases irrespective of method of diagnosis (microbiologically confirmed or clinical), initiation of treatment (whether on treatment or not), source of treatment (Government or non-government), type of patients (TB or DR-TB), type of regimen used for treatment (daily or intermittent) should be notified to public health system.

Once private practitioner notifies TB patient information following action will be taken by local public health staff of general health system of Government or local bodies and entered in Niksahy:

- Patient home visit as per convenience of patient,
- Counselling of TB patient and family members,
- Treatment adherence and follow up support ensure treatment completion,
- Contact tracing, symptoms screening, evaluation of TB symptomatic and offering INH chemoprophylaxis to eligible contacts,
- Offering HIV testing, Drug Susceptibility Testing (DST), if eligible.

All laboratories shall notify TB cases with information as per Annexure 18 A and medical practitioners, Clinics, Hospitals, Nursing homes shall notify TB cases with information as per Annexure 18 B.

Strengthening Surveillance System will ensure that appropriate measures can be taken by the program to implement quality TB diagnosis and treatment as per STCI.

TB notification system

To make a complete surveillance system and to bring missing TB patients under surveillance system, all TB patients diagnosed under the programme (either microbiologically confirmed or clinical) need to be notified. All TB patients who are put on standardized treatment regimen under the programme or other regimen due to clinical indication (as initiated in tertiary care institute) within programme are to be notified. Over and above, all TB patients treated outside government health system need to be notified under one uniform surveillance system and to be accounted for total cases notified.

Once a TB patient is diagnosed, s/he will be notified in a **peripheral health facility TB notification register** (Annexure-attached TB notification register). The notification is to be done on the same day of diagnosis. If his/her treatment is initiated in the same health facility, patient's treatment information, follow up and treatment outcomes are updated in the same TB notification register. Else, the patient will be referred to the health facility catering area of patient's residence.

There s/he will be registered as referred-in patient, and treatment related information will be updated. There will be two cohorts – notification (diagnosed) and treatment cohorts. For final notification report for any health facility all cases notified will be included. For Treatment cohort reporting all cases initiated on treatment at the respective health facility will be included (including the transferred in patients)
To account for notification, TB notification register of health facility where patient is diagnosed will be source of information. And to account for treatment cohort, TB notification register of health facility where treatment is initiated will be source of information as well as transferred in and referred in patients.
Notification number will be generated at time of first notification either at diagnosis or at initiation of treatment whichever comes first.

Illustration of how the system will function in different situation

Situation 1: A patient is diagnosed in a health facility by any method and put on treatment in the same health facility.

Laboratory technician or MO will notify a patient and close the loop by initiating treatment and reporting information in the same notification register.

Situation 2: A patient is diagnosed in one health facility and referred to other health facility for treatment.

A patient will be notified by LT or MO and refer the patient for treatment with intimation to treating health facility. MO of treating health facility will initiate treatment and give feedback to diagnostic health facility to account for treatment which will be entered in the same register in which notification occurred at time of diagnosis.

Situation 3: A patient diagnosed as clinically (based on CXR, histopathology, cytology, USG, CT Scan, MRI, other), MO diagnosed the patient will notify the patient.

Situation 4: A patient is initiated on treatment without being notified earlier; MO of treating health facility will notify the patient.

Notification number will be generated at time of first notification either at diagnosis or at initiation of treatment whichever comes first.

For the purpose of monitoring and to ensure accountability for each notified TB patient following mechanism will be adopted.

Each health facility will be monitored for both indictors; fate of all notified patients as well treatment outcomes of all patients initiated on treatment including transferred in cases.

Since each health facility will have both patients diagnosed in their facility as well cases referred in and transferred in; reconciliation of treatment outcomes will be done at all levels starting from TB Unit and above.

Level of monitoring	Fate of notification for treatment initiation	Treatment outcomes of all those initiated on treatment
TB Unit	Compilation of information on each fate of notification for all health facilities within TU and those referred outside TU should be segregated and further monitored for those whose feedback is received and not received. While doing so, compilation on extend of all referred in patients and transferred in patients by all health facilities within TU should be done and monitored for extent to which the feedback is given to referring health facilities within TU and outside TU	Compilation of treatment outcomes at TU level should include all patients initiated on treatment at all health facilities within TU including referred in and transferred in patients The gap between all patients notified and whose treatment outcome is known should be monitored and should decrease over a period of time with increasing feedback to all health facilities for referred and transferred out patients within TU
District level	Compilation of information on each fate of notification for all health facilities within district and those referred outside district should be segregated and further monitored for those whose feedback is received and not received While doing so, compilation on extend of all referred in patients and transferred in patients by all health facilities within TU should be done and monitored for extent to which the feedback is given to referring health facilities within district and outside district	Compilation of treatment outcomes at district level should include all patients initiated on treatment at all health facilities within district including referred in and transferred in patients The gap between all patients notified and whose treatment outcome is known should be monitored and should decrease over a period of time with increasing feedback to all health facilities for referred and transferred out patients within district

Level of monitoring	Fate of notification for treatment initiation	Treatment outcomes of all those initiated on treatment
State level	Compilation of information on each fate of notification for all health facilities within state/UT and those referred outside state/UT should be segregated and further monitored for those whose feedback is received and not received While doing so, compilation on extend of all referred in patients and transferred in patients by all health facilities within TU should be done and monitored for extent to which the feedback is given to referring health facilities within state and outside state	Compilation of treatment outcomes at state level should include all patients initiated on treatment at all health facilities within state including referred in and transferred in patients The gap between all patients notified and whose treatment outcome is known should be monitored and should decrease over a period of time with increasing feedback to all health facilities for referred and transferred out patients within state
National level	At national level Compilation of information on each fate of notification for all should be monitored for the extent of feedback received against the sent by all health facilities. The gap should reduce over a period	At national level Compilation of treatment outcomes at district level should include all patients initiated on treatment at all health facilities in the country The gap between all patients notified and whose treatment outcome is known should be monitored and should decrease over a period of time with increasing feedback to all health facilities for referred and transferred out patients.

National level At national level Compilation of information on each fate of notification for all should be monitored for the extent of feedback received against the sent by all health facilities.

The gap should reduce over a period At national level Compilation of treatment outcomes at district level should include all patients initiated on treatment at all health facilities in the country.

The gap between all patients notified and whose treatment outcome is known should be monitored and should decrease over a period of time with increasing feedback to all health facilities for referred and transferred out patients. Such compilation and monitoring should be facilitated with use of Nikshay and review of the feedback mechanism in real-time using ICT coupled with exchange of information between health facilities, TB Units, district and states periodically; at least fortnightly at TU level, monthly at district level quarterly at state level and bi-annually at national level.

NIKSHAY

Nikshay is the platform for the National Tuberculosis Programme Surveillance System.Nikshay envisages to establish ICT enabled state-of-art surveillance system with system utilization by 100% stakeholders and ensuring 100% notification of TB cases at diagnosis (microbiologically confirmed &clinical). The programme also envisions continuous monitoring and treatment adherence for all TB patients registered with eNikshay, enable tracking of all registered TB patients across TB control lifecycle, geographies, transfers and referrals.

The first step is to ensure registration of all healthcare establishments across public and private sector in Nikshayand to ensure participation of all providers over time in e-Nikshay.Details of every TB patient diagnosed and / or initiated on treatment must be updated in NIKSHAY. If the patient has not been registered in NIKSHAY at the time of examination at the diagnostic centre, s/he may be registered/ notified afresh. Look for a NIKSHAY ID for the patient who has already been registered. If not available, registering/notifying afresh will generate a new ID. This ID is unique and is important for further follow up and linkages with treatment support programs. All health establishments must report all TB cases and their treatment outcomes to public health authorities (District Nodal Officer for Notification).

Detailed guidance on usage of Nikshay will be updated from time to time on the programme website and strategy document for Supervision, monitoring and evaluation.