Ministry of Health & Family Welfare
Government of India

World Health Organization
India

TRAINING MODULES (5-9)

FOR PROGRAMME MANAGERS & MEDICAL OFFICERS

National TB Elimination Programme
Central TB Division
Ministry of Health & Family Welfare,
Government of India, New Delhi

TRAINING MODULES (5-9)

FOR

PROGRAMME MANAGERS &

MEDICAL OFFICERS

Suggested citation: TRAINING MODULES (5-9) FOR PROGRAMME MANAGERS AND MEDICAL OFFICERS; New Delhi, India: Central TB Division, MoHFW, Government of India; July 2020., Available from:www.tbcindia.gov.in

Cataloguing-in-Publication (CIP) data: Contributor.author: Central TB Division, Ministry of Health & Family Welfare, Government of India; Coverage.spatial: New Delhi, India; Date.issued: June 2020; Language.iso: English; Publisher: Central TB Division, Ministry of Health & Family Welfare, Government of India ; Rights: CC BY-NC-SA 3.0 IGO; Rights.uri:https://creativecommons.org/licenses/by-nc-sa/3.0/igo; Categories: Tuberculosis, Training, Manual; Title: TRAINING MODULES (5-9) FOR PROGRAMME MANAGERS AND MEDICAL OFFICERS; Type: Electronic Publication; Rights.holder: Central TB Division, Ministry of Health & Family Welfare, Government of India.

Sales, rights, and licensing: To submit requests and queries on rights and licensing, write to ddgtb@rntcp.org.

Contents

Module 6

Module - 7

Module – 8

Module – 9

Abbreviations

ADSM	Active Drug Safety Monitoring and Management
ACH	Air Change per Hour
ADR	Adverse Drug Reaction
AE	Adverse Event
AFB	Acid Fast Bacilli
AIC	Airborne Infection Control
AIDS	Acquired Immune Deficiency Syndrome
ALT	Alanine Aminotransferase
Am	Amikacin
AMC	Adr Monitoring Center
Amx/Clv	Amoxicillin/clavulanate
ART	Anti-retroviral Therapy
ARV	Anti-retroviral
AST	Aspartate Aminotransferase
ATS	American Thoracic Society
Bdq	Bedaquiline
BPL	Below Poverty Line
BTS	British Thoracic Society
CAP	Conditional Access Programme
CBNAAT	Cartridge Based Nucleic Acid Amplification Test
Cfz	Clofazimine
Clr	Clarithromycin
Cm	Capreomycin
CMO	Chief Medical Officer
CP	Continuation Phase
CPT	Co-trimoxazole Preventive Therapy
Cs	Cycloserine
CTD	Central TB Division

CUP	Compassionate Use Programme
C-DAC	Centre For Development of Advanced Computing
C-DST	Culture And Drug Susceptibility Test
CL-HIV	Children Living with HIV
DAIDS	Division of Aids
DBT	Direct Beneficiary Transfer
DCGI	Drugs Controller General of India
DDG	Deputy Director General
DDS	District Drug Store
DDR TBC	District Dr TB Centre
DG	Director General
DGHS	Directorate General of Health Services
Dlm	Delamanid
DMC	Designated Microscopy Centre
DOT	Directly Observed Treatment
DOTS	Core Approach Underpinning the Stop TB Strategy for TB Control
DRT	Drug Resistance Testing
DR TB	Drug-resistant Tuberculosis
DR TBC	Drug-resistant Tuberculosis Centre
DSMC	Drug Safety Monitoring Committee
DST	Drug Susceptibility Testing
DTO	District TB Officer
DVDMS	Drug Vaccine Distribution Management System
E	Ethambutol
ECG	Electrocardiogram
ECHO	Extension of Community Health Care Outcomes
EP-TB	Extra-pulmonary Tuberculosis
EQA	External Quality Assurance
Eto	Ethionamide
EU	European Union

FDA	Food and Drug Administration
FEFO	First Expiry First Out
FL LPA	First Line-line Probe Assay
FQ	Fluoroquinolone
GLC	Green Light Committee
GFATM	Global Fund for Aids, Tuberculosis & Malaria
Gfx	Gatifloxacin
GMSD	General Medical Stores Depot
GoI	Government of India
H	Isoniazid
Hh	High Dose Isoniazid
HRCT	High Resolution CT Scan
ICH	International Conference on Harmonization
ICT	Information Communication Technology
ICMR	Indian Council for Medical Research
IP	Intensive Phase
Ipm	Imipenem
IPAQT	Initiative for Promoting Affordable & Quality TB Test
IQC	Internal Quality Control
IRL	Intermediate Reference Laboratory
ISO	International Standard Organization
Km	Kanamycin
LC	Liquid Culture
LFT	Liver Function Test
Lfx	Levofloxacin
L J	Lowenstein Jensen
LPA	Line Probe Assay
LT	Laboratory Technician
LTFU	Lost To Follow Up
Lzd	Linezolid

MAC	Mycobacterium Avium Complex
MDR TB	Multi-drug Resistant TB
Mfx	Moxifloxacin
Mfxh	High Dose Moxifloxacin
MGIT	Mycobacteria Growth Indicator Tube
MIC	Minimum Inhibitory Concentration
MIS	Management Information System
MO	Medical Officer
MoHFW	Ministry of Health and Family Welfare
MO-DMC	Medical Officer-designated Microscopy Centre
MO-PHI	Medical Officer- Peripheral Health Institute
MO-TC	Medical Officer TB Control
MOTT	Mycobacterium other Than Tubercle Bacilli
MoU	Memorandum of Understanding
Mpm	Meropenem
MR	Mono Resistance
MSS	Monthly Stock Statement
NAAT	Nucleic Acid Amplification Test
NABL	National Accreditation Board for Laboratories
NTEP	National TB Elimination Programme
NDRS	National Drug Resistance Survey
NDR TBC	Nodal Dr TB Centre
NGO	Non-government Organization
NGS	Next-generation Sequencing
NHPS	National Health Protection Scheme
NHM	National Health Mission
NIRT	National Institute for Research in Tuberculosis
NITRD	National Institute for Tuberculosis And Respiratory Diseases
NRL	National Reference Laboratory
NSP	National Strategic Plan

NTI	National TB Institute
NTM	Non-tuberculous Mycobacterium
Ofx	Ofloxacin
OPD	Out Patient Department
PAS	P-aminosalicylic Acid
Pdx	Pyridoxine
PDR	Poly Drug Resistance
PHI	Peripheral Health Institute
PK/PD	Pharmacokinetic/pharmacodynamics
PL-HIV	People Living with HIV
PMDT	Programmatic Management of Drug-resistant Tuberculosis
PP	Private Provider
PQC	Product Quality Compliance
PSM	Procurement and Supply Management
PT	Previously Treated
PTE	Pre-treatment Evaluation
Pto	Protionamide
PvPI	Pharmaco-vigilance Programme of India
QA	Quality Assurance
QSE	Quality System Elements
R	Rifampicin
NTEP	Revised National Tuberculosis Control Programme
RR TB	Rifampicin Resistant Tuberculosis
R&R	Recording & Reporting
RT-MERM	Real Time Medication Event Reminder Monitor Device
S	Streptomycin
SA	Statistical Assistant
SAE	Serious Adverse Event
SCM	Supply Chain Management
SDG	Sustainable Development Goals

SDS	State Drug Store
SLD	Second Line Anti-TB Drugs
SLDST	Second Line Drug Susceptibility Testing
SLI	Second Line Injectable
SL-LPA	Second Line-line Probe Assay
SME	Supervision, Monitoring & Evaluation
SoP	Standard Operating Procedures
SPC	Specimen Processing Control
STLS	Senior TB Laboratory Supervisor
STO	State TB Officer
STR	Standardized Treatment Regimen
STS	Senior Treatment Supervisor
TALFU	Treatment After Lost To Follow Up
TAT	Turn-around Time
TB	Tuberculosis
TBHV	TB Health Visitor
Thz	Thioacetazone
ToR	Terms of Reference
Trd	Terizidone
TU	TB Unit
UDST	Universal Drug Susceptibility Testing
ULN	Upper Limit of Normal
UPT	Urine Pregnancy Test
USAID	United States Agency For International Development
USFDA	United States Food & Drug Administration
WCO India	World Health Organization Country Office for India
WHO	World Health Organization
XDR TB	Extensively-drug Resistant TB
Z	Pyrazinamide

MODULE 5

PROGRAMME MANAGEMENT FRAMEWORK

Introduction

Programme management comprises of planning, implementation and its maintenance. Realistic planning is based on situational analysis of geographical and demographic features and the available infrastructure. Implementing the programme consists of provision of trained staff, ensuring logistics in place and service delivery. The objectives are achieved and maintained through recruitment and training of the required staff, maintaining logistics in place, promotion of programme through advocacy and IEC activities and maintenance of quality of services involving all the stakeholders, supervision, monitoring, periodic evaluation and appropriate corrective actions

Learning Objectives

At the end of the module the participants will learn about various aspects of programme management and be able to undertake the related activities.

Programme Management Framework	
Section A	Programme Planning and Implementation
Section B	Human Resource Development
Section C	Advocacy, Communication and Social Mobilization & engaging community
Section D	Financial Management
Section E	Direct Benefit Transfer & Nikshay Poshan Yojana
Section F	Patient support for TB Elimination
Section G	Quality of service delivery

Section A: Programme Planning and implementation

Learning objectives: At the end of the module the participants will learn about various aspects of programme management and be able to undertake the related activities.

1. National Health Mission
2. NTEP Norms and Basis of Costing
3. District Annual Action Plan and State Annual Action Plan
4. Implementation of Annual Action Plans

Introduction

We have discussed END TB objectives for the country and the National strategic plan (2017-25) to achieve TB elimination in Chapter 1. National strategic plan 2017-25 clearly describes the Detect-Treat-Prevent-Build strategies to achieve TB elimination. For successful implementation of these strategies, program managers at various levels (National/State/District/ Sub-district) must plan program activities systematically with definite objectives/ targets, activities, timelines, budgetary provisions and monitoring indicators with clear delegation of responsibilities to appropriate personnel. It is also important to monitor implementation periodically and to take mid-course correction for the best outcomes.

Planning

Planning is a basic management function involving formulation of one or more detailed plans to achieve optimum balance of needs or demands with the available resources. The planning process (1) identifies the goal and objectives to be achieved, (2) formulates strategies to achieve them, (3) arranges or creates the means required, and (4) implements, directs, and monitors all steps in their proper sequence. To have the best results in any management process, there should be adequate planning. Hence any program manager is expected to be a good planner also.

Realistic planning is based on situational analysis of geographical and demographic features and the available infrastructure. For example, NTEP, when we want to achieve 100% notification of targeted TB cases in district A, we might have achieved only 60% of that. Then we have 40% gap in TB notification. We need to analyse what prevents us from achieving the remaining notification. It starts with a few questions.

1. Do we have adequate human resources to detect cases; e.g. Peripheral health workers, MOs, LTs?
2. Are all of them trained in case finding?
3. Is adequate infrastructure available for making the diagnosis; e.g. DMCs with functional Microscopes, CBNAAT machines?
4. Are there any access issues?
5. Do they have adequate internet connectivity to reflect the notifications in NIKSHAY?

Once we identify gaps in district A, we have to plan to have the gaps filled. For example, district A has only 70% of the health workers, 60% of the MOs and 50% of laboratory technicians in place. The district has only 15 DMCs whereas the actual requirement is 22. Approximately 40% of the population is residing in difficult terrain with limited access to diagnostic facilities. Internet connectivity is poor in peripheral health centres. We have identified these gaps that prevent district A from achieving 100% notification. In this context, when we do the planning, district programme management unit has to find provisions for filling the vacancies of HR or establishing 7 more DMCs and specimen collection transportation systems for Non-DMCs and inaccessible areas and handheld devices with portable internet connectivity.

While we analyse the gaps, let us also do a Strength-Weakness-Opportunity-Threat (SWOT) analysis of the district wherein we analyse the strengths of the district (a committed CMHO, a good number of motivated LTs) weaknesses (hilly in-accessible areas, untrained PP) opportunities (additional social support systems from local self-governments) and threats (increasing burden of diabetes) and find out what additional support are there and what additional challenges we need to address.

Once we have identified the gaps and actions to full fill them, adequate budgeting should be done with consideration to various budgetary resources, for e.g. NHM, State government plan fund, Local Self-Government fund, Corporate Social Responsibility (CSR) Fund.

NATIONAL HEALTH MISSION (NHM)

Health Care Infrastructure in India

The Primary Health Care infrastructure has been developed as a three-tier system with Health Sub-Center (SC), Primary Health Center (PHC) and Community Health Center (CHC) as its three pillars.

The primary health centres which provide the initial point of contact, have basic

medical services (including for TB), and have referral linkages for specialized care with the secondary and tertiary levels. The primary health centres are manned by Medical Officers. To support the MO, there are Peripheral health supervisors, MPWs and ANMs and other paramedical staff. To tide over variations in individual state's capacity (health being a state subject), priority health issues including maternal and child health interventions, TB treatment etc. are being supported as Centrally Sponsored Schemes (national health programmes), and delivered through the public health care delivery system.

NHM- A Partnership for Meeting People's Health Needs

To fulfil every individual's right to access basic health care services, the existing primary health care system required restructuring and strengthening to make it more functional, efficient and accountable. Substantial investments were required to strengthen, upgrade and expand the public health infrastructure to enable them to conform with norms and standards.

NHM was launched in 2005 as the National Rural Health Mission (2005-12). It sought to provide effective healthcare to rural population throughout the country with special focus on 18 states, which have weak public health indicators and/or weak infrastructure. The Mission is an articulation of the commitment of the Government to increase public spending on Health from 0.9% to 2-3% of GDP. Later, (in May 2013) the urban component was incorporated as NUHM to strengthen the urban health care delivery by improving the institutional capacity, engaging with local bodies and partnerships with other sectors. Together NRHM and NUHM are known as NHM.

Under NHM, the difficult areas with unsatisfactory health indicators were classified as special focus states to ensure the desired attention. The thrust of the mission is to establish a fully functional, community-owned, decentralized health delivery system with inter-sectoral convergence at all levels., It ensures simultaneous action on wide range of determinants of health like water, sanitation, education, nutrition, social and gender equality. Institutional integration with fragmented health sector is expected to provide focus on outcomes, measured against the Indian Public Health Standards (IPHS) for all health facilities. The focus is on functional health system at all levels, village to district. In this process, the Mission would help achieve goals set under the National Health Policy and the Sustainable Development Goals. This large-scale investment into the health system would have positive ripple effects on the overall functioning of the health system and the disease specific interventions, including TB. The TB programme, being a part of NHM, will utilize these resources to strengthen TB care and elimination activities.

NHM Strategies:

The Accredited Social Health Activists (ASHA) programme is one major component of NHM. Every village/large habitat will have a female ASHA chosen and accountable to the gram panchayat to act as the interface between the community and the public health system. ASHA would act as a bridge between the Auxiliary Nurse Midwife (ANM) and the village and accountable to the Panchayat. She will be an honorary volunteer, receiving performance-based compensation for promoting universal immunisation, referral and escort services for Reproductive and Child Health (RCH), provision of DOT, helping in initial home visits, retrieval action for treatment interruption, construction of household toilets, and other healthcare delivery programmes.

Provision of untied funds and flexible financing is another component at all levels, from sub centre to district hospital, empowering local health care providers and addressing many critical gaps in service delivery. By forming registered societies at PHCs, CHCs and district hospitals, legal entities are created that have greater flexibility in discharge of their functions. Rate of utilization of these funds is increasing each year.

Further strategies are,

- Formation of Rogi Kalyan Samiti in states with provision of untied funds to them for enabling facility development.
- Involvement of Panchayat standing committees members in District Health and Family Welfare Societies, Rogi Kalyan Samiti (RKS), the Village Health, Nutrition and Sanitation Committee (VHNSC) and selection of ASHAs.
- Training of the nurses and medical officers for multiple /specialist tasks is additional strategy taken up by few states.
- Setting up of an integrated State and District Health Societies for financial management, monitoring etc with representation from all programme divisions.
- Decentralized district level planning through preparation of District Program Implementation Plans (PIP), which bring together the specific health needs of the people and the district information making a basic skeleton of the state plan. NTEP district PIP is a part of this plan.
- Setting up of district and state Programme Management Units (PMUs)

- To build capacity for data collection, assessment and review for evidence-based planning, monitoring and supervision, finance management logistic/procurement infrastructure and
- To inculcate management skills in health team for the techno-managerial role to be played by the respective district programme officers

  Programme Management Units (PMUs) are provided through recruitment of contractual Master in Business Administration (MBA), Chartered Accountants (CA), Masters in Computer Application (MCA) & Data Entry Operators (DEO) has been made.
- Improvement in financial management procedures with the use of e-transfer of funds up to districts and induction of personnel with financial management skills.
- Setting up of Urban Primary Health Centers

TB related objective of the Mission is "Prevention and control of communicable and non-communicable diseases, including locally endemic diseases" with expected outcome of "maintaining 90% cure rate through entire Mission period and sustaining planned case detection rate"

With the additional resources being pooled in the structural and human resource, deficits are expected to be met, as TB control strategy with its critical components like laboratories, drug stores, Laboratory Technician, have been incorporated as part of the Public Health Standards established for each level of health institution. In addition, ASHA workers would also facilitate enhanced outreach activities. The Mission envisages to fill in the gaps in the existing programmes with respect to infrastructure and service delivery.

NTEP is a centrally sponsored scheme under NHM, and fund flow for programme activities is through state treasuries followed by State and District Health Societies. The Health Societies are vehicles for receipt of funds from GoI and implementation of the project activities.

Under the mission, in order to reflect the requirements of the state a consolidated "Programme Implementation Plan" (PIP) is prepared. States need to incorporate various TB control activities and budget it in Part 'D' of the PIP. It is subsequently reviewed by Central TB division during the appraisals of the PIP.

NTEP is implemented through the general health system. The overall responsibility of implementing NTEP activities rests with the staff under general health services.

Flow of Funds for NTEP under NHM:

The funding for NTEP is done from the budget of the Ministry of Health & Family Welfare. The annual budget of the project would be allocated as per the National Strategic Plan and PIP submitted by the states. GoI releases these funds on a half yearly basis to the State Treasury for further release to State Health Society.

Under NHM the Finance Management Group (FMG) maintains a centralized database of releases and utilizations i.e. RCH, additionalities under NHM, Immunization and National Programmes i.e. NTEP, NVBDCP, other NDCPs etc.

Appointment of Auditors under NHM:

As per the financial guidelines of NHM a single auditor will be appointed for all the programmes under NHM at SHS and DHS level and a chapter on NTEP will be submitted separately. This is to ensure timely disbursements and submission of audit reports to the donor agencies.

NTEP Norms and basis of costing (Pl refer to annexures)

The National Strategic Plan 2017-25 (NSP) has been developed as a roadmap to guide the country and the States to achieve target of 80% reduction in TB by 2025.To support States to execute TB services in line with the NSP and achieve the goal, norms and basis of costing has been revised for TB services provided through NTEP under the NHM. These are indicative norms and may be used as a guide to prepare annual action plans. These may not be deemed to be limiting factors and states may provide justification to NHM in case they need to incur expenses over and above these norms. For North-Eastern states (Arunachal Pradesh, Assam, Nagaland, Mizoram, Meghalaya, Manipur, Tripura and Sikkim), these norms would be applicable at the rate of 1.3 times as compared to the rest of the country except for the expenditure under the head "Contractual Services" or contractual staff in other heads.

NTEP Budget Heads

NTEP expenditures are organised under 19 heads. These are,

1. Civil works
2. Laboratory materials
3. Honorarium/ Counselling charges
4. Advocacy Communication Social Mobilization (ACSM)
5. Equipment Maintenance
6. Training
7. Vehicle Operation (POL and Maintenance)
8. Vehicle Hiring
9. Public Private Mix (PP & NGO Support)
10. Medical Colleges
11. Office Operation (Miscellaneous)
12. Contractual Services
13. Printing
14. Research & Studies & Consultancy
15. Procurement of Drugs
16. Procurement of Vehicles
17. Procurement of Equipment
18. Patient Support and Transportation Charges
19. Supervision and Monitoring

All activities a district could plan to achieve TB elimination based on the Detect-Treat-Prevent Build strategies under National Strategic Plan for TB Elimination 2017-2025 can be described and budgeted under one of these heads. For example, TA/DA for supervision and monitoring, can be budgeted under head 19 whereas TA/DA for training can be budgeted under head 6.

Procurement of drugs is most often done by Central TB Division. In exceptional circumstances, CTD will permit the states to have local procurement. Hence a minimal amount may be budgeted under this head too.

NHM budget heads

NHM follows a generic Financial Management Regulations Code that encompasses budget heads of all disease control programs and MCH services. Budget heads of various programs may differ from each other. Hence after the activities are planned under NTEP, they have to be aligned with the FMR codes of NHM. Only then, district/state and central NHM will be able to consolidate the individual PIPs for necessary approvals. The NHM FMR codes applicable to NTEP are as below:

NHM Budget heads	
1. Service Delivery – Facility based	10. Review, Research, Surveillance & Surveys
2. Service Delivery – Community based	11. IEC/ BCC
3. Community Interventions	12. Printing
4. Untied Funds	13. Quality Assurance
5. Infrastructure	14. Drug Warehousing & Logistics
6. Procurement	15. PPP
7. Referral transport	16. Program Management
8. Service Delivery – Human Resource	17. IT initiatives for strengthening Service Delivery
9. Training & Capacity Building	18. Innovations

FMR Codes

Earlier NTEP has 19 designated Financial Management Report (FMR) heads (i.e. H-1 to H-19), which is now merged into overall 18 heads

FMR Code	Previous NTEP Budget Head	Annexure name	New FMR Code
H1	Civil Work	Annexure for Infrastructure Strengthening	5.3.14
H3	Honorarium	Annexure for Community Interventions	3.2.3.1 This has three components: 3.2.3.1.1 3.2.3.1.2 3.2.3.1.3
			1.2.3.2 (NPY)

H4	ACSM (State & district)	Annexure for IEC/BCC	11.17.1/ 11.17.2/11.17.3
		Annexure for Printing	5.3.14
H5	Equipment Maintenance	Annexure for Procurement	6.1.3.1.3
			1.3.1.12
H6	Annexure for Training and Capacity Building	Annexure for Procurement	9.5.14.1
			9.5.14.3
H7	Annexure for Program Management Activity	Annexure for Procurement	16.1.3.1.13
H8	Vehicle hiring	Annexure for Program Management Activity	16.1.3.1.14
			14.2.11
H9	Public Private Mix (PP/NGO Support)	Annexure for PPP	15.5.1
			15.5.2
			15.5.3
			15.5.4 (new activity-multisectoral coordination)
H10	Medical Colleges	Annexure for Training and Capacity Building	9.5.14.2
		Annexure for Review, Research & Surveys and Surveillance	10.2.9
		Annexure for Program Management Activity	16.1.2.1.21
H11	Office Operations	Annexure for Program Management Activity	16.1.4.1.10
H12	Contractual Staff	Annexure for Programme Management	16.4.1.4.2, 16.4.1.4.4, 16.4.1.4.5, 16.4.1.4.6, 16.4.1.4.7, 16.4.1.4.8, 16.4.1.4.9, 16.4.1.4.10, 16.4.1.4.11, 16.4.2.2.4, 16.4.2.2.7, 16.4.2.2.9, 16.4.2.2.10, 16.4.2.2.6, 16.4.2.2.5,

		Service Delivery - Human Resource	8.1.1.5, 8.1.5, 8.1.13.1, 8.1.3.8, 8.1.13.11, 8.1.13.10
		Annexure for Drug Warehousing & Logistics	14.1.1.2
H13	Printing	Annexure for Printing	12.13.2
H14	Research & Studies & Consultancy	Annexure for Review, Research & Surveys and Surveillance	10.2.8
H15	Procurement of Drugs	Annexure for Procurement	6.2.14.2
H16	Procurement of Vehicles	Annexure for Procurement	6.5.1
H17	Procurement of Equipment	Annexure for Procurement	6.1.1.18.1
H18	Patient Support & Transportation Charges	Annexure for Referral Transport	7.5.1/7.5.2
H19	Supervision and Monitoring	Sub Annexure for Program Management Activity	16.1.2.2.13
New Section			
		Annexure for Drug Warehousing & Logistics	6.2.14.3, 6.5.2, 6.5.3, 14.2.10, 14.2.11, 14.2.12
	Sub-national disease certification	Annexure for Review, Research & Surveys and Surveillance	10.5.1
	Community engagement under NTEP	Annexure for Community Interventions	3.2.6.1/3.2.6.2
	LTBI	Annexure Service Delivery – Facility Based and Annexure Service Delivery- Community based	1.1.5.7 and 2.3.2.8

Preparation of District & State PIP –

(Pl refer to the annexures for the format on Annual Action Plan at NTEP website)

To ensure sufficient fund allocation, it is required to have strong and accurate PIPs at state and district levels. It provides opportunity for visualizing program activities for the entire year. The district needs to prioritise and understand the fund requirement for important activities. Preparation of PIP is a decentralized activity. It is mandatory to districts to prepare the district PIP first, in consultation with the program staff, NHM block and district program management units and the District Chief Medical Officers. Relevant PIP components are also to be prepared by STDC, State Task Force for Medical Colleges, Nodal DRTB Centres, IRLs and State TB Cell. Finally, the state TB cell has to collate all these components along with the district PIPs to compile a state PIP.

PIPs include the following:

1. Goal and objectives of the program with prioritization of issues and activities in the district / state
2. Strengths and weaknesses of the program in the district (internal factors)
3. Opportunities and threats that exist in the district for the program (external factors)
4. Action plans and budgetary requirements for the next financial year

Actions plans and budgetary requirements:

In order to take the corrective steps and to achieve the desired level of performance, the DTO would have to plan activities, time frame and finance for the next financial year. The budget in the PIP is thus based on desired performance levels and activities planned to achieve the same.

The format of action plans and budgetary requirements includes:

1. Assessment of the current performance of NTEP in the district
2. Determination of a feasible level of performance for the coming year
3. Determination of priority areas
4. Determination of activities under each priority area

Let us have closer look into the planning process with appropriate examples.

Example 1

Mandya district is planning to do an activity named TB vulnerability mapping of all individuals in the district. In detail, the district plans to visit 2,50,000 households of the district covering entire district population of 10,00,000 with a pre-tested vulnerability questionnaire, meet every member of the households and assess their risk for TB to serve as a database for future active case finding. The district intends to complete the activity by 30th September 2019. How does the district plan this activity?

Let us consider the activities for basic planning for budgetary purpose. What are the activities that require money?

- Printing of formats and IEC materials
- Training of survey volunteers
- Remuneration for survey volunteers
- Data entry charges
- Office expenditure for meetings, communications etc.

Activity/item	*Unit cost in Rs	Number of units	Total cost in Rs	Justification
Printing of survey questionnaires	2	2,60,000	5,20,000	2,50,000 houses; additional 4% in reserve
Survey volunteers' TA/DA for training	100	1250	1,25,000	1250 volunteers @ one volunteer per 200 houses
Lunch and 2 refreshments for training	200	1300	2,60,000	1250 volunteers and 50 supporters including facilitators
Training venue, audio visuals	3000	50	1,50,000	50 trainings @25 trainees per batch
Remuneration of survey volunteers	10	25,00,00	25,00,000	@Rs10/volunteer/ house
Data entry charges	05	25,00,00	12,50,000	@ Rs.5 per house hold
Office expenses			50,000	For communications

*the unit cost in example is just indicative, it varies from place to place. During preparation of PIP, the district should consider this.

When we align the proposed expenses under specific FMR codes of NHM, we could see that each of these items may belong to different FMR codes. Printing expenses will be aligned with FMR code 12 (printing). Training expenditure will be aligned with FMR code 9 (Training and capacity building) whereas remuneration of survey volunteers will be aligned with FMR code 3 community interventions sub FMR 3.2.3 (Honorarium / Counselling Charges for NTEP) and data entry charges are to be aligned with FMR code 16 (Program management) sub FMR 16.1 miscellaneous.

This is a basic planning for PIP. With necessary justifications and approval processes by NHM, this is to be reflected in the district NHM PIP. Once approved, district team can go ahead with implementation.

PIP process should be decentralised. The practice of central preparation of PIP (for example state prepares a single PIP or preparing PIP of all districts) is a wrong practice. In that case, many district priorities will be missed out.

Microplanning for specific activities

To implement the activity, the management team has to have a micro planning done. It means, planning with more specific and granular details. Let us learn micro planning with the same example.

In Mandya district there are 2,50,000 households. The plan is to complete the activity by 30th September 2019. How do we micro plan for this particular activity?

The households are to be divided into small units for ease of the survey. The DTO, under the leadership of CMHO/DMO and with the support of Block Medical Officers, has divided the households into 1250 units with 200 houses in each unit. He has numbered the units from 1 to 1250. Each unit is assigned to a survey volunteer. The volunteer cannot visit all 200 houses on a single day. So, the planning team has divided the household units into 20 subunits with 10 in each subunit where the volunteer will visit one subunit per day. He has also numbered the units from 1 to 10. What is the ideal time to visit the houses to meet all individuals? Evenings when the members are back from their work or day time during holidays? Who is the best survey volunteer from the locality? With all these considerations DTO has planned to involve health volunteers from local self-help groups, ASHA and Anganwadi workers as the volunteers, to visit 10 houses on every Sunday completing the activity in 20 Sundays. He has also planned to assign the responsibility of supervising 10 volunteers with one multi-purpose health worker. 10 multipurpose health workers will be supervised by the health supervisor of the block and by the medical Officer of the Block (Block MO/MOTC). He has also documented this planning with approval by the District Chief Medical Officer. Thus, the micro plan is owned by the general health system for implementation.

Implementation

Implementation consists of provision of trained staff, ensuring logistics in place and service delivery. The objectives are achieved and maintained through recruitment and training of the required staff, maintaining logistics in place, promotion of programme through advocacy and IEC activities and maintenance of quality of services involving all the stakeholders, supervision, monitoring, periodic evaluation and appropriate corrective actions.

How do we implement activities planned in NTEP annual PIP? For this we need a system. We have the general health system where the state health department is the agency for implementation and management, we have the largely unorganized private health sector, the health wings of other public sector agencies (e.g. Railways, Port trusts, ESI), health systems of local self-governments (e.g. health wing of the Municipal Corporation), and other systems of medicine. Health department of central government also has a wide network across the states and districts. It is the responsibility of NHM/NTEP core system to coordinate, lead, provide logistic and managerial support, and guide the focussed implementation of TB elimination activities by these agencies. Certain activities are directly implemented by NTEP (e.g. Training, Supervision and monitoring, quality assurance).

Let us examine some of these systems in detail. The state government health department has service delivery points covering the entire population. It provides clinical and public health services. The district/sub-district level hospitals and medical college hospitals provide clinical services whereas the primary health centres provide public health services through its health sub centres and community volunteers and limited clinical care. Similar are the functions of the hospitals and health posts of LSGs. However, private sector generally is unable to provide public

health services other than limited institution-based services (e.g. Immunization, sterilization). NGO health systems may have more opportunities for public health service delivery due to their community-based organization.

Though diagnosis and management of TB involves many clinical activities, it is largely a public health program. This is more evident with contact tracing, active case finding, community-based treatment support, nutritional support, patient incentives and enablers, linkage with social protection schemes etc. Hence, implementation of TB elimination activities is the responsibility of general health systems whereas, NTEP is responsible for capacity building, logistic support, assistance in supervision and monitoring, provision of recording and reporting tools, quality assurance and evaluation.

Implementation of activities for TB Elimination approved in the PIP

As we have discussed, annual PIPs are prepared with a decentralized bottom to top approach involving the general health system. Once PIP is approved by NHM, district/state health systems have to implement the approved activities within definite timelines. Let us learn this with a few examples.

Example 1.

Idukki district's approved annual PIP 2019-20 has an activity named training of medical officers in Nikshay. In detail, the district plans to train 200 medical officers in batches of 20 over a day, expected to be completed by 31st August 2019. How does the district implement this activity?

The nodal agency to implement this activity is NTEP, means the District TB Officer, since this is a capacity building activity.

Timeline is from April 1st 2019 to 31st August 2019. Means there are 5 months' time to implement this activity from 1st April 2019 to 31st August 2019.

Since the number of participants per batch is 20, it needs 10 working days to complete the training.

The DTO has to prepare a Nikshay training calendar. (Ideally, along with preparation of PIP, a training calendar for all training activities and a Gantt chart for all other time bound activities are to be prepared). Here DTO Idukki has decided to conduct 4 trainings in April, 4 in May and 2 in June. Training dates for April are fixed on 10th,11th, 20th and 21st, in May on 15th,16th, 17th and 18th and in June 12th and 13th with approval of the CMHO/DMO. Steps to be undertaken are, the preparation of line list, divide them into batches and advance communication with the venue details and training agenda. Since it is a computer-based training, training venue should have computer with internet connectivity for every participant. Facilitators for training to be identified. Accommodation for participants if needed to be arranged. Food and refreshments, and training materials (Nikshay user manual, writing pads, pen, writing boards and markers) have to be arranged. If audio visual aids are necessary, they also should be arranged. Pre-test, post-test questionnaires are to be prepared. Arrangements for attendance sheets and other documentations including photographs have to be made. It is evident that with all these details, appropriate expenditure should have been budgeted in the PIP. If some of these activities or resources are missed out, the budget will not be realistic and the DTO may have to struggle for resources.

Group discussion:

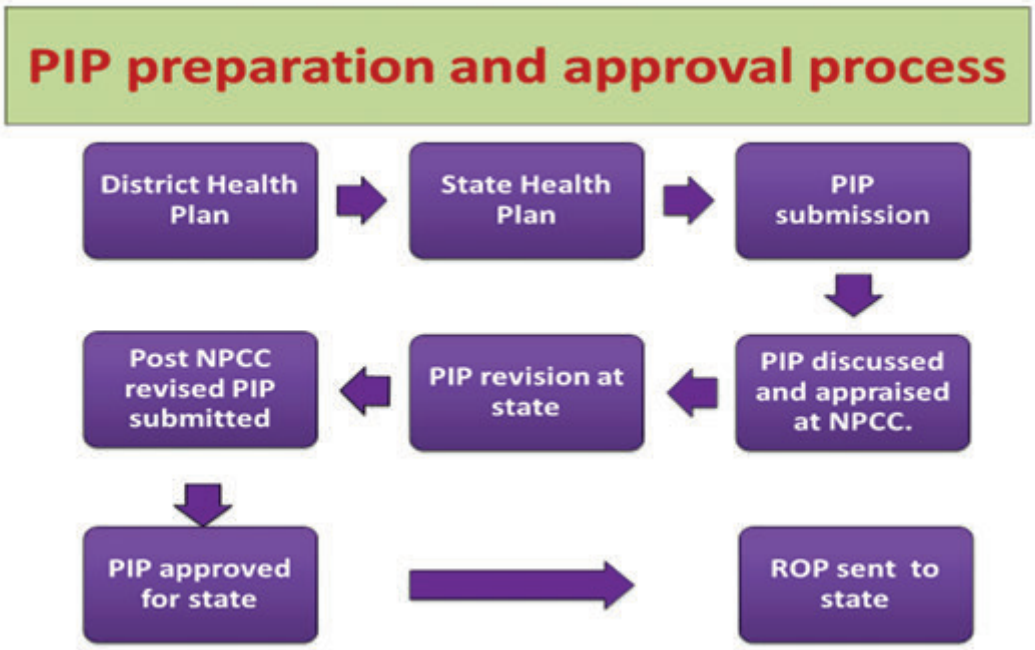
With the help of the facilitator, discuss how you will implement universal DST for Rifampicin to all diagnosed TB patients of your area.

Preparation for review of action plans

District Health Society reviews the action plan and approves it. In addition to assisting in logical planning, this would also save time as the member secretary (DTO) will not have to seek approval for each individual activity.

In addition to district annual action plans, there will be action plans at state functionaries like State TB Cell, STDC, IRL, Medical College State Task Force and Nodal DRTB Centres. These are compiled at the state level along with district plans. The state PIP is submitted to the SHS and once approved; it is incorporated in the state NHM PIP. Once approved by the SHS, a copy of the State NTEP PIP is to be sent to Central TB Division.

SHS submits the state NHM PIP to GoI for approval. The national mission conducts National Program Coordination Committee (NPCC) meetings where National Program Managers and state program managers led by respective Mission Directors discuss each proposal in state PIP in detail. If revision is needed, a revised post NPCC PIP will be submitted by the SHS. Once approved, Central NHM will send a Record of Proceedings (ROP) to state. This contains the final approved head wise budget. States are expected to spend for the activities in the approved PIP. No separate approval is needed activity wise.



Section B: Human Resource Development

In this section the participants will learn about

1. Human Resource Development (HRD) including duties and responsibilities, recruitment and extension etc Training & capacity building of different cadres
2. Assessing training needs (initial, refresher & update)

Most of the success that NTEP has achieved can be attributed to its team of dedicated, hard-working and knowledgeable workers. Being under the overall umbrella of NHM, the HR policy and practice is mostly governed by the State Program management Unit, NHM. The Central TB Division supplements this by providing contractual staff at strategic positions of the programme network, developing terms of reference for hiring these staff and formulating standardized training material for creating uniform knowledge among workers. Key positions under NTEP are there in the annexure

Qualified HR is the biggest asset to NTEP. An adequately staffed, trained, and motivated health workforce is required to achieve the ambitious TB control objective of ending TB strategy. The goal of NTEP's HRD strategy is to optimally utilize available health system staff to deliver quality TB services, and to strengthen the supervisory and managerial capacity of programme staff overseeing these services.

NTEP will align more effectively with general health system under NHM to leverage field supervisory staff more effectively, and increase capacity building of the staff to equip them to handle multiple tasks of TB care, DR-TB and TB-HIV. The NTEP has integrated its HRD policy in the NHM HR policy to enable it to function at optimal capacity completely integrated with the general health system.

NTEP has developed standardized training modules for each component and customized it for each category of staff. Several lakhs of health care providers have been trained in various components of the NTEP but TB case finding, treatment, DR-TB, TB-HIV, PPM, and ASCM activities need a better approach to achieve universal access for TB care.

Considerations under PIP as per norms and basis of costing for NTEP-2019

- Compensation package for the contractual staff will be decided by the respective State NHM based on state specific situation, job contents, job responsibilities for similar positions under NHM.
- The existing staff will get annual increment based on the satisfactory performance at a rate decided by the State NHM.
- Loyalty bonus: As per NHM Norms.
- Contract period will be as per the State NHM decision. Contracts will be renewed by the society based on satisfactory performance.
- The TA/DA norms will be as per the NHM guidelines. DA (daily allowance for travel) is only to be released against appropriate travel documentation. Where eligible such DA may be paid under State Government rules or as mentioned in supervision & monitoring head.
- A fixed allowance of Rs. 1500 per month / as per State Norms will be given to contractual staff at TU/DMCs in notified tribal / hilly / difficult areas. The Performance (Workload) based incentives will be given to the contractual staff at State / district / sub-district level. Decisions related to performance-based incentives would be centred on core performance indicators as below.

- These indicators are based on consideration of workload to the Staff also. The indicators would be changed as per the programme priority time to time from the Central level.
- Indicators targets can be revised by the State a priory, depending on the variation in epidemiology of district.

The details of the revised norms & costing under NTEP Mar 2019 are annexed

Key responsibilities

Organization of program human resources and responsibilities of HR at various level are as follows:

a. National level

CTD at National level covers key programmatic areas like Diagnosis and treatment: DSTB and DRTB, Surveillance, M&E, research and HRD, Finance and PSM, Partnerships, ACSM and PSS. At the National level DDG TB is the Programme Manager and is supported the team of ADDG TBs, DD TB/ DADG and Consultants responsible for individual thematic areas.

b. State level

State TB Cell is the basic unit responsible for TB control activities which is under the umbrella of National Health Mission. State TB Officer is the programme manager responsible for planning, implementation, supervision, monitoring and overviewing the full programme. The team at state level comprise of a full team along with consultants responsible for implementation of the programme, with the support of State functionaries under the General Health System. The technical hand of the State TB Cell is the State TB & Demonstration Centre (STDC).

c. District TB Centre

is the key unit responsible for all activities related to NTEP implementation initiating from advocacy, diagnosis, treatment (DS & DRTB), follow up, managing comorbidities, service delivery, diagnostic & treatment infrastructure, setting up DRTB centres, TB forums, community engagement & multi-sectorial involvement drug management etc under the leadership of DTO along with the team for Supervision & monitoring.

d. TB Unit level

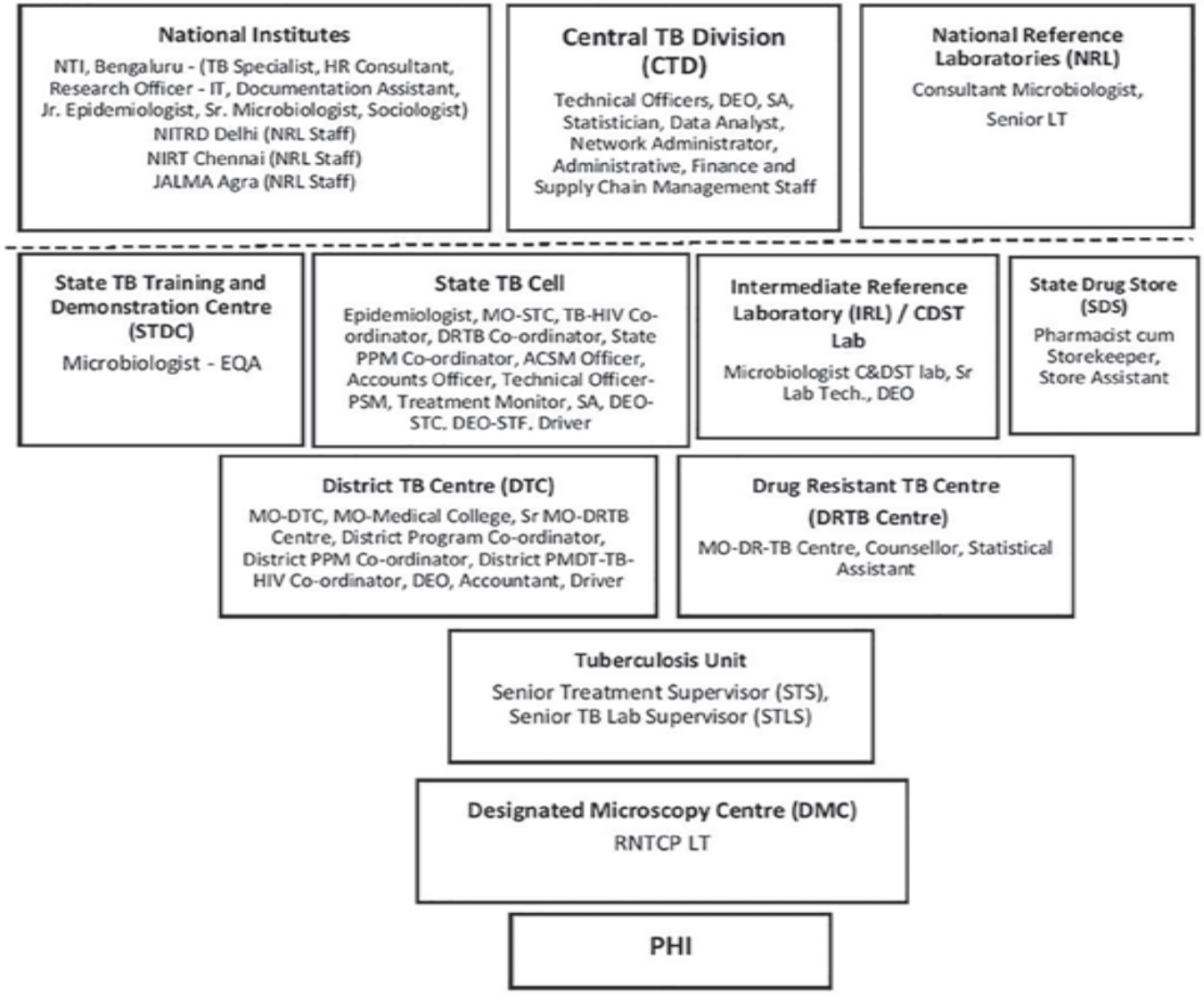
It takes care of the activities like drug management, DBT, supervision, monitoring and programmatic management at the block level under the guidance of the Block medical officer or Taluk. It is usually situated at the block headquarter. MO-TC is supported by two supervisors, STS & STLS.

e. PHI level

The basic patient management happens at this level under the guidance of Medical officer who is responsible for all activities at the PHI level.

e. For a health sub centre level witch is relevant for the health and wellness centre

The organogram given below enumerates key NTEP positions at various levels:



Detailed terms of reference of these staff is provided at www.tbcindia.gov.in

Hiring of these staff is done by respective State/District Health Societies (other than National level positions). The compensation package for NTEP contractual staff has to be decided by respective States, based on State specific situation, Job contents, Job responsibilities, and compensation for similar positions in other programmes under National Health Mission. Terms of reference of staff will be as per the programmatic guidelines.

NTEP has adapted a cascading methodology to train its Staff, with National institutes and NRLs being involved as centres for training the trainers (STO, STDC Staff, IRL Staff, DTO, Medical College faculty, MO-STC etc.) on various components of the programme. These trainers come back and train the relevant cadre. The State TB Training and Demonstration Centres (STDCs) have been playing a major role in imparting State level NTEP trainings. The MO-TCs and supervisory staff (STS, STLS) are trained at the STDCs who go on to train Treatment Supporters and lab technicians, respectively, at the district/Block/TB Unit level. DTOs with support of MO-TCs are entrusted with the responsibility of training the Medical Officers at district level.

The entire training process is reported under NTEP programme management activities and closely monitored by National/ State / District officials.

Capacity building

Capacity building is based on standardized modules which elaborate the technical and management components of the program. Special areas like paediatric TB, Drug resistant TB, TB with co-morbidities, Extra-pulmonary and other serious forms of TB, PPM, IPC, ACSM, SME etc are covered in these modules and also detailed as annexures to the main modules. Various categories of HR are trained/sensitized with the customized forms of these modules. The pharmacists, staff nurses, ANM, MPW, MPHS, Community volunteers are all trained with the same module for MPWs.

The customized modules for programme officials and staff, PPs, NGO functionaries, medical college faculties which include non-practicing TB teachers, non-practicing policy teachers, general practitioners, specialists, post graduates, researchers and professional associations are being developed using the advancement in ICT through capsular online e-training. The courses for each HR category ranging from the national policy makers and program managers to the community volunteers and patients' peer group are compiled based on their terms of reference (TOR) and Job Responsibilities with clear focus on development of necessary skills to perform the tasks for each type of trainee.

Training

High quality training has to be imparted at different levels periodically through induction training, retraining and periodic updating. The entire training process should be closely monitored by the State / District officials.

Development of training schedule

Since the personnel at each level support and supervise the level directly below them, generally staff at the state level should be trained prior to the staff at the district level, and the staff at the district level should be trained prior to the staff at the sub-district and peripheral levels (cascade training). To ensure that the appropriate personnel are trained at the correct time, a training schedule is developed for each staff of the health services and the staff of the laboratory services separately.

Following factors are considered while developing the training schedule

- Assessment of training need.
- The time by which the training material is ready.
- The order in which personnel will be trained;
- The duration of the training period for each group;
- Number of batches and the number of trainees in each batch.
- Number of each type of personnel (e.g. state, district) to be trained for each quarter of the year.

Services of the staff from well performing neighbouring districts / states can be availed for training purposes. Well performing districts should be utilized as field demonstration areas during training. All classroom teaching should be demonstrated at these field sites.

Guidance for trainings

- **Induction training:** Initial comprehensive training before assuming the responsibilities of the programme
- **Retaining:** Periodically retaining of already trained staff in NTEP need to be considered (every 3 years)
- **Update training:** Newer initiatives or changes in the policy of the programme are to be conveyed to the health personnel
- **Refresher training:** Based on training needs of the identified personnel focused on specific deficits of knowledge or skills

NTEP Induction Training

Category	Duration (working days)	Batch Size	Training Material	Venue
STO/MO-STC STDC Director and Staff/TB-Officer/Assistant Programme Officer, State TB-HIV co-ordinator/Assistant Programme Officer, State DRTB Coordinator	12	20	NTEP Modules 1-9, (In addition, Strategy Document on Supervision and Monitoring, SOP of Stare and District Drug Store, national AIC Guidelines, EQA Guidelines, PMDT Guidelines etc.)	Central Institute
MO-DTC	12	20	NTEP Modules 1-9	STDC
MO PHI / MO-TC	5	25	NTEP Modules 1-4	District
MO District DRTB Centre	5	20	NTEP MO Module 1-4 PMDT Guideline	STDC
District DRTB and TB-HIV Supervisor/District PPM Coordinator	5	20	STS/MPW module TB-HIV Module/PMDT guidelines	STDC
STLS	15	6	LT Module, then STLS Module	STDC/IRL
LT	10	8	LT Module	District
State Drug Store Staff/ Pharmacist in RNTCP TU level-3 days	3	25	MPW Module/Manual on Std. Operating Procedures for State Drug Store	STDC/District
Paramedical staff (MPHS/ TBHV/MPW/Health Assistant and other staff)	2	25	MPW Module, sections of STS Module (Nikshay/ DBT/treatment support)	District/TU
ASHA/USHA/Anganwadi Worker/Midwives/ Community Volunteers, (for PPM Module)	2	25	Treatment Supporter Module	TU/PHI
Private/NGO/other sector Medical Practitioners (for PPM Module)	6 hrs	20	Treatment Module for Medical Practitioners	District level
SA	5	12	STS Module	STDC/District
ACSM Officer	5	Need based/All states	Handbook of communication strategy	Central level

Nikshay Operator (State and District level), Data Analyst	5	10	MPW module, then Nikshay, DBT/ PFMS/ Data curation Management and analysis	STDC
Accountants for district	2	Need based	Manual on Financial Management and Guidelines	State level/STDC
Accountants- state level	2	Need based	Manual on Financial Management	Central

The tables below will facilitate preparation of training schedule.

Initial Training on EQA

Category	Duration (days)	Batch Size	Training Material	Venue
EQA (Master Trainers/ Microbiologist/ IRL LT's Senior LT of IRL/ Medical college)	5	15	EQA Manual, Panel slide preparation demonstration in the laboratory, field visit to DTC & DMC	Central Institute
STO, STDC Director, APO, State TB cell MO	2	20	STDC Document, presentation	Central Institute
Lab trainings (IRL)				
DTO	3	15	EQA Manual, field visit to DTC & DMC	Central Institute

Name of the training Program	Duration (days)	Batch Size	Category of personnel trained	Curriculum	Level/ Venue
Comprehensive Training Course for Laboratory Personnel (Solid Culture, Liquid Culture, LED-FM, LPA, CBNAAT, NIKSHAY)	12	6-10	Microbiologist Technical Officer/Sr LTs	Module reading, Presentation, Demonstration & Hands on training	National
LPA First line & second line	5	5	IRL LT, TO, Microbiologist	Presentation, Demonstration & Hands on training	National

Name of the training Program	Duration (days)	Batch Size	Category of personnel trained	Curriculum	Level/ Venue
Preventive maintenance and minor repairs of Binocular microscope	4	15-20	STLS, DMC LT, IRL LT, Microbiologist	Module reading, Presentation, Demonstrati on & Hands on training	National Tuberculosis Institute, Bangalore
Liquid culture and DST (First line and Second line)	5	4-6	IRL LT, TO, Microbiologist	Presentation, Demonstrati on & Hands on training	National
LT Modular and NIKSHAY training	10	10-15	LT of DMC	Module reading, slide preparation, observation, grading, recording and reporting Hand on training	District
NIKSHAY	1	30-40	STLS	Presentation	State
CBNAAT and NIKSHAY Training	2	10	CBNAAT LT, STLS	Presentation, demonstration of sample processing	State
STLS refresher training	2	10-15	STLS	Presentation	State
LT Refresher training	2	10-15	LT	Presentation	District

NTEP training on intensified package on TB/HIV

Category	Duration (days)	Batch Size	Training Material	Venue
TB-HIV Master Trainers	2	10	TB HIV Modules	State level
STO/ DTO/ MO-DTC/ MOTC	1	10	Module for MOs on TB/HIV	Central Institute
MO	1/2	30	Module for MOs on TB/HIV	District
Module for STS STLS on TB/HIV	1	10	Module for STS STLS on TB/HIV	District

Initial NTEP training for Medical College staff

Category of staff to be trained	Type of training	Place of training	Trainers	Training material	Duration (in days)
Medical Staff					
ZTF/STF Chairperson	Concise modular	National institute	Central institute staff	NTEP –Key facts and concepts	5-12 *
ZTF/SFaculty in charge of NTEPTF Chairperson	MO-TC modular	State-level	STC/STDC staff	1-4 modules	2
TOT's	MO-TC modular	National/ State-level	Central Institute/ STC/STDC staff	1-10 modules	12
HODs and Senior staff	Concise modular	State-level/ Central	STC/STDC / Central staff	NTEP – Key facts and concepts	5-12*
Other faculty members	MO modules	Medical college	Faculty in charge of NTEP	1-4 modules	5
PG students/ Residents/ Interns/UG's	Part of Curriculum + Sensitization	Medical College	Faculty in charge of NTEP	PG Curriculum	12
Paramedical staff					
Nurses	MPW training	Medical College	Faculty in charge of NTEP	MPW module	2
Pharmacists	MPW training	Medical College	Faculty in charge of NTEP	MPW module	2
Other paramedical staff	MPW training	Medical College	Faculty in charge of NTEP	MPW module	2

*5 days or 12 days modular training for those interested.

Training and retraining should be planned and undertaken periodically based on training needs assessment

Selection of course facilitators

Classroom training, especially skill-based training requires effective facilitators to manage, motivate and evaluate course participants. Practical training requires staff who has actual experience in NTEP implementation, including recording and reporting of activities.

Important attributes of good facilitators are -

- ability to assess the training needs
- planning capabilities
- leading group discussions
- ability to organize and facilitate team functioning and provide supportive supervision
- encouraging active participation
- listening to others without interruption
- good knowledge of the subject
- good communication skills
- soft spoken with trainees and co-facilitators which promotes active interaction
- providing constructive feedback during training
- should be open to learn himself / herself from the trainings
- should take suggestions / feedback from trainees constructively

Promising facilitators for future trainings can be identified during the training of state and district level staff. Personnel from the general health services, general laboratory services, and experts in TB from other institutions in the country (e.g. medical or nursing schools) may all be good candidates for being facilitators.

Facilitators training

During facilitator training, each prospective facilitator should complete the module(s) they will facilitate. They should read all the training material and complete all the exercises (e.g. role plays, individual exercises). During the training course, trainees are encouraged to think about areas which they may find difficult and plan ways to help make it easier. They are also facilitated to identify ways to answer potential questions and concerns. Initially these personnel can participate as co-facilitators in a training course with an experienced facilitator before they start to facilitate independently.

EXERCISE 1

For this exercise, you will work with a colleague to discuss potential problems in planning course logistics and obtaining resources for training.

Instructions

1. Discuss potential problems in planning course requirements and obtaining resources for the course. Record your responses on the table below.
2. Identify ways to reduce or eliminate the problems.

Potential problems	Possible causes	Possible solutions

After completing the exercise, module reading may be continued.

Calculation of cost of training

The cost of training is included in the budget for implementing the NTEP in the respective state or district. All costs associated with training at the different levels of the NTEP are to be planned and budgeted for. These costs include

- per diem for participants and facilitators (TA / DA /honorarium)
- Travel expenses for participants and facilitators
- Audio-visual equipment/ video conferencing equipment
- Printing cost for training materials
- Stationary
- Fee for using a training facility; and
- Refreshments
- Contingent expenses.

Implementation of the training plan

Planning of training should be a part of annual action plan at state and district level which should include the tentative time schedule for the year decided in consultation with respective authorities well in advance. The training plans are implemented after the receipt of the required funds. This will include training the state / district personnel as mentioned above.

Supervision and evaluation of the training quality and needs

District health units and peripheral levels of health services are visited to observe the performance of the staff related to NTEP activities. By this the quality of the training imparted and training needs can be assessed. These visits to be utilized for hand holding and updating of the staff in the areas of knowledge/ skill gaps and also in transmission of new knowledge/ policy changes

Preparation of supervisory schedules and checklists.

The person who conducts supervisory visits should ensure that the health workers are performing their job adequately. S/he should observe personnel at work, review records and forms for completion and accuracy, and speak to the staff about their job responsibilities, case-finding, treatment outcomes, etc.

Supervisory visits provide an opportunity to evaluate the training programme and to identify staff who needs to build additional skills, or who have other training needs. Supervision is the opportunity to give on the job training to such staff if feasible and in case there is no progress in performance even after on the job training, there is a need for assessing the quality of training received.

The supervisor should also interact with community leaders and with patients, to assess their perception of the programme and to discuss with them the means for improving the services and community support.

A staff member may not be adequately performing his/her job because of lack of skills or knowledge. The person evaluating the performance must determine the specific skill or knowledge in which the person is deficient. S/he should recommend and ensure that the staff member is retrained.

A questionnaire may be used to evaluate quality of training. These include Pre-Test, Post- Test and Follow-up of the trainees using the tool (questionnaire / interview).

Transfer of knowledge (gained during the training) into the skills can be assessed after few months up to a year by observing the activities being performed by the personnel on the job/ indicators where applicable and comparing the same with earlier performance of the similar nature.

Refresher schedules

Category	**Maximum duration (days)**	**Venue**
STO/STDC staffs	5	Central Institute
DTO/ MO-TC	3	STDC
STS	2	STDC
STLS	3	STDC
LT	2	District
MO/TO/ SA/ IEC Officer	2	District
Pharmacist/ Staff Drug Management (State/ District/ TU)	1	District/TU
MPHS	1	District/TU
TB Health Visitor etc.	1	TU/PHI
MPW/HA etc.	1	TU/PHI
ASHA/USHA/Anganwadi Worker/ Midwives/ Community Volunteers, etc	1	TU/PHI
Community based DOT providers	1	TU/PHI
Accountant	1	State/District
EQA (Master Trainers/ Microbiologist)	2	Central Institute
EQA-IRL LT	2	Central Institute
EQA (STDC Dir/ STO)	1	Central Institute
EQA (DTO/MOTC)	1	STDC
EQA (STLS)	1	District
TB-HIV (DTO/ MOTC)	1	STDC
TB-HIV (MO)	1	District
TB-HIV (STS/STLS)	1	District
PMDT trainings -DTO, /MODTC /MOTC, MOPHI-	2 2	State District
PMDT trainings - (STS, STLS, LT)- -	1	District

It is imperative to ensure that the highest quality of training is undertaken by NTEP. This is the first step towards achieving technical excellence and success of the programme. Training calendar to be included in PIP with the support of STDC

Section C

Advocacy, Communication and Social Mobilization & Engaging Communities

The term ACSM has three components – "Advocacy", "Communication", and "Social Mobilization" and within the context of NTEP, ACSM refers to health communication activities in TB care and control. The term 'IEC' / ACSM are generally used interchangeably; however, NTEP uses ACSM as being used globally by Stop TB Strategy. ACSM activities aimed at:

1. Creating awareness among people about the disease (signs and symptoms) diagnosis, and treatment in order to increase accessibility and utilization of services.
2. Engaging all care providers for providing standardized treatment in order to widen the scope for providing good quality treatment and diagnostic services to all TB patients in a patient-friendly environment from whichever health care facility they seek treatment from.
3. Mobilize communities for engaging them in TB care, and to increase ownership of the programme by the communities.
4. Improve referral for case detection and community support for case holding.
5. Combat stigma and discrimination, and empower people affected by TB.
6. Increase capacity of health providers and front-line workers to deliver ACSM messages.
7. Mobilize political and administrative commitment, and enhanced resources for TB.
8. Increase ownership by the community.
9. Increase capacity for prioritizing TB in health planning at the grass root level of Panchayati Raj.

Advocacy is persuading legislators/policy makers who have a larger say and can influence the programme in a greater manner to enrol with your cause to ensure the political commitment and to achieve specific policy changes, programme changes or resource allocation that benefits the population involved in this process. At the state and district level advocacy activities are for decision makers & opinion leaders.

Communication means transfer of ideas from one person to another person(s). It looks into Behaviour Change Communication (BCC) which aims to change knowledge, attitudes and practices among various groups of people by relying a series of messages about the disease frequently e.g.: - It aims to change behaviour - such as persuading people with symptoms to seek treatment and to foster social change, supporting processes in the community.

Social Mobilization is engaging all/multiple stakeholders with your cause and extracting their "contribution" to strengthen community participation for sustainability and self-reliance. This group may include decision makers, the media, NGOs, opinion leaders, policy makers, the private sector, professional associations, TB patient networks and religious groups.

ACSM is a cross cutting, supportive strategy that focuses on all aspects of TB care for ensuring quality in diagnosis and treatment interventions, strengthening social support systems for TB care and community interventions to reduce stigma. ACSM activities in the current NSP will focus on improvement in early identification of symptoms of TB and referrals from community aiding in early case detection, support for treatment adherence; combating stigma and discrimination; people's empowerment; mobilizing political commitment and capacity building for decentralized planning.

Although distinct from one another, advocacy, communication and social mobilization (ACSM) are most effective when used together.

Advocacy seeks to ensure that there is strong commitment for TB control.

Policy advocacy informs politicians and administrators how an issue will affect the country and outlines actions to take to improve laws and policies

Programme advocacy targets opinion leaders at the community level on the need for local action

Media advocacy validates the relevance of the subject, puts issues on the public agenda, and encourages the media to cover TB-related topics regularly and in a responsible manner so as to raise awareness of problems and possible solutions.

Communication aims to favourably change knowledge, attitudes, behaviours, and practices among various groups of people.

Social mobilization brings together community members and other stakeholders to strengthen community participation for sustainability and self-reliance.

The emphasis is on decentralized planning and implementation of need based ACSM activities so as to make them programmatically and culturally relevant.

Communication needs assessment for developing need based ACSM Activities. Needs are defined as 'relating the expressed or unexpressed requirements of the community/group to what is currently being available; or the gap between what exists and what required'. Identifying the needs is the starting point of any intervention including ACSM activities. The need assessment is the process of identifying and understanding a problem and planning a series of action to deal with it.

The table below will give a brief outline of key messages and media options that can be offered to different target groups

Target group	Objectives	Key messages	Media options
Patient and their families	1. To increase awareness about signs and symptoms of TB 2. To ensure treatment completion and treatment adherence 3. Empowering patients by providing information about the treatment, its duration, side effects	• Cough of 2 weeks or Fever for 2 weeks, Significant weight loss, Night sweats; the presence of all/any one of the above symptoms could be due to TB. • Contact nearest health center for sputum examination • Treatment is available free of cost.	• Inter-personal communication • Patient provider interaction meetings • Outdoor publicity (Hoardings, wall paintings, posters, bus panels, banners etc.)

General Public	1. To increase awareness about signs and symptoms of TB, diagnosis, duration of the treatment 2. Informing communities about the availability of free diagnosis and treatment facilities at the nearest health facility 3. To inform about the curability of TB and reduce stigma by involving cured persons in DOT provision.	• TB is fully curable with 6 months of anti TB treatment. • Drugs should be taken under the direct observation of the health care provider / community DOT Provider • Community can take responsibility for DOT Provision- TB support groups	Community level meetings e.g., Mahila Mandals, Panchayat meetings, youth clubs. • Outdoor publicity • Outreach activities (Street plays, folk media, street theatre, haats, melas and festivals) • Mass media (electronic media)
Health Care Providers (Public and private)	1. To sensitize and advocate about regime recommended by STCI and RNTCP 2. To encourage private care providers to refer chest symptomatic to the nearest facility for diagnosis and treatment 3. To involve care providers as Treatment supporters 4. To inform providers about provider incentives and patient enablers	• Advent of rapid molecular techniques and the importance of UDST • Advocate about the standardized regimen under RNTCP. • Treatment should be given under Direct Observation to ensure cure • ICT based treatment adherence support systems are available • Incentives are available for notification and reporting treatment outcome • NPY scheme is available through DBT	• Sensitization meetings • CMEs/Seminars • News paper / journals • Information booklets • Electronic media
Decision makers/ opinion leaders	1. To persuade decision makers of the importance of TB 2. To ensure resources for TB care	• To inform about the magnitude of the TB problem • To inform about the action that will support TB control activities	• One to one meetings • World TB Day activities • News papers/print media/ Brochures • Electronic media

Models for ACSM

Advocacy models

Advocacy seeks to ensure that there is strong commitment for TB control.

- Policy advocacy informs politicians and administrators how an issue will affect the country and outlines actions to take to improve laws and policies

  - Call to Action for a TB-Free India brought all the key stakeholders together on a high visibility "call to action summit" in March 2016. Wide participation of various stakeholders in TB, especially private health sector, corporate sector, civil society, media, academia and the community committed to the ambitious goals of the End TB strategy. TB Champions from amongst patients, technical experts, political representatives, public figures, sportsperson, and celebrities added their voice to increase visibility and action on TB.
  - Parliamentary forum for tuberculosis

- Media advocacy validates the relevance of the subject, puts issues on the public agenda, and encourages the media to cover TB-related topics regularly and in a responsible manner so as to raise awareness of problems and possible solutions.
  - Designate and train media spokespersons at national/state/district levels in the program.
  - Routinely and openly share information about TB with the media
  - Engage academia / subject experts to share scientific research publications with the media
  - Sensitize media and program staff about language so as to avoid stigmatizing
  - Design effective online and social media strategies for TB to engage with the public (FB/ Twitter handle for program)

Communication models

Communication aims to favourably change knowledge, attitudes, behaviours, and practices among various groups of people.

- Launch and sustain TB Campaigns
- Design a campaign to combat stigma/myths
- Assess, revise and disseminate patient education literature
- ICTC/TU/rapid molecular tests etc.
- Focus on prevention (cough hygiene/ etiquette)
- Greater thrust on-ground activities such as street plays, video van, group meetings, outdoor communications in high risk areas/vulnerable populations

Social Mobilization Models

Social mobilization brings together community members and other stakeholders to strengthen community participation for sustainability and self-reliance.

- Empower TB community (affected community, cured patients, caretakers) to speak up/ voice their concerns
- Ensure civil society partnerships from groups such as Rotary, faith-based organizations

TB Forum for Community Engagement

TB forums at the district level aim to empower and engage TB affected community. The TB Forum would comprise of 10-15 members from different sectors (Persona affected by TB (TB Champions), civil society, media, government officials, key stakeholders etc). Constituted by TB patients (cured or on treatment) and community leaders the forums give a voice to the affected community and advocate with the programme managers for resolution of challenges faced by TB patients in accessing TB services. TB forum act as bridge between community, TB patient, health system and civil society along with advocacy activities to influence policy changes for accessible, affordable, supportive TB-services to entire population with special focus on poor and vulnerable groups.

Objectives of the TB forum:

- To engage with policymakers and implementers to ensure justice, rights and dignity of TB patients for effective service delivery
- To supplement and complement government initiatives to enforce TB patient- friendly law, policy and programs.

- To reduce stigma and discrimination and ensure social security of TB patients, survivors and their families
- To improve awareness on various government schemes, provisions, facilities available for TB patients and to improve treatment literacy and adherence among TB patients
- To engage in evidence-based advocacy with the stakeholders to expand services

State TB Forum

Composition of State TB forum is as under:

1. Principal Secretary / Secretary HFW, State Govt., Chairperson
2. Mission Director (NHM), Co- Chairperson
3. Project Director, SACS, Member
4. Director Health Services, Member
5. WHO Representative – TB Consultant, Member
6. State Chairman/Secretary, Tuberculosis Association of India, Member
7. Public Health Foundation of India / any reputed public health institute Member
8. State President, Indian Medical Association, Member
9. Professor of Pulmonary Medicine of Medical College, Member
10. Professor of Community Medicine of Medical College, Member
11. Two Representative of reputed local NGO/CSO on rotation basis, Member
12. One Representative from NTEP Partner on rotation basis, Member (REACH/UNION/ CHAI/PATH/FIND/WHP/KHPT)
13. Representative of Network of PLHIV, Member
14. Five TB Patient Representatives (Past TB patients / Family members) Member
15. Representative of Corporate Sector/Industry/PSU, Member
16. State TB Officer, Member Secretary
17. Representative from SACS, Member
18. Representative from NPCDCS, Member
19. Representative from SPMU, Member
20. Representative from RCH, Member
21. Representative from NUHM, Member

Term of References of the State TB Forum is as follows

1. To advice on strategies for engaging communities affected by TB and increasing community participation in TB program through formation of network of people affected by TB
2. To periodically review progress of involvement of community and network of people affected by TB
3. Highlighting the concerns and needs of TB patients, to work with Government and a broad range of individuals and organisations to develop better, and more responsive, health services.
4. Advocating for greater and more equitable access to quality, accurate and independent information for patients to focus at reducing health inequalities and by campaigning for patients to have the right to be involved in decision-making.

5. Enabling a dialogue between all stakeholders involved in a TB patient's care such as government (including local self-government), medical and paramedical associations, industry, the medical insurance companies, private healthcare providers and diagnostic centres.
6. Create and manage resources to sustain and accelerate TB prevention, control, care and treatment services through community engagement and network of people affected by TB
7. Facilitate nutritional support, linkages with social welfare schemes, rehabilitation of several TB patients.
8. Grievance Redressal
9. Meetings will be convened at every six months

Composition of District TB forum is as under:

1. District Magistrate, Chairperson
2. Chief Executive Officer, Zilla Parishad, Co-Chairperson
3. District Development Officer, Member
4. Chief Medical/Health Officer, Member
5. WHO Representative – TB Consultant, Member
6. Representative of Tuberculosis Association of India, Member
7. Pulmonologist or Community Medicine Professor of Medical College, Member
8. District President, Indian Medical Association, Member
9. Two Representatives of reputed local NGO/CSO on rotation basis, Member
10. Representative from NTEP Partner on rotation basis, Member (REACH/UNION/CHAI/ PATH/FIND/WHP/KHPT)
11. Five TB Patient Representatives (Past TB patients / Family members), Member
12. Representative of District Level Network of PLHIV, Member
13. Representative from Officer from RCH who manages NGOs, Member
14. District TB Officer, Member Secretary
15. PRI member (Zilla parishad/BDC/Panchayat), Member
16. Journalist, Member
17. Advocate, Member
18. Representative from corporate sector, Member

Term of References of the District TB Forum is as follows

1. To advice on strategies for engaging communities affected by TB and increasing community participation in TB program through formation of network of people affected by TB.
2. To periodically review progress of involvement of community and network of people affected by TB.
3. Highlighting the concerns and needs of TB patients, to work with Government and a broad range of individuals and organisations to develop better, and more responsive, health services.
4. Advocating for greater and more equitable access to quality, accurate and independent information for patients to focus at reducing health inequalities and by campaigning for patients to have the right to be involved in decision-making.

5. Enabling a dialogue between all stakeholders involved in a TB patient's care such as government (including local self-government), medical and paramedical associations, industry, the medical insurance companies, private healthcare providers and diagnostic centres.
6. Create and manage resources to sustain and accelerate TB prevention, control, care and treatment services through community engagement and network of people affected by TB.
7. Facilitate nutritional support, linkages with social welfare schemes, rehabilitation of several TB patients.
8. Grievance Redressal.
9. Meeting will be convened at every six months.

Developing ACSM Annual Action Plan

ACSM Annual action plan is an integral part of the annual district action plan for NTEP. State Tuberculosis Officer (STO) at the state and the District Tuberculosis Officer in the district are responsible for planning, organizing, coordinating, implementing and monitoring all ACSM activities.

a. Preparation of ACSM Annual action plan

ACSM annual action Plan is an integral part of the District/State Annual Action plan. ACSM planning and implementation has to be done in the context of TB control activities in your district/state.

Steps for developing ACSM Annual Action plan:

Step 1- Identify the Gaps / programme challenges for example- is it low case detection? Or it is high default rate; or is it low cure rate? If the number of issues is many, then prioritize for three challenges to be considered in one-year plan

Step 2- Brainstorming barriers / challenges that contribute to the gaps- Are these characteristics of the health system or behaviour of healthcare providers / or of the community that contribute to the gap? Staff working for TB as well as general health system staff and other stakeholders may be involved in this process.

Step 3- Identify the type of barrier -

i. I = Individual (patient characteristics, belief, behaviour)
ii. G= Group (societal or cultural belief or practice)
iii. S = System (Policies, health system, resource, provider belief & behaviour)

Step 4- Assess whether you can improve the situation using ACSM

Step 5- Developing ACSM action plan

a. Annual Action Plan Format for Advocacy, Communication and Social Mobilization (ACSM) for NTEP

1) Information on previous year's Annual Action Plan
   a) Budget proposed in last Annual Action Plan: .....
   b) Amount released by the state: .....
   c) Amount Spent by the district- .....
2) Permissible budget as per norm…
3) Budget for next financial year for the district as per action plan detailed below: .....

Program Challenges to be tackled by ACSM during the Year 2018-19	**WHY** **ACSM Objective**	**For WHOM** **Target Audience**	**WHAT** **ACSM Activities**		**When Time Frame**				**By WHOM**	**Monitoring and Evaluation**		**Budget**
Based on existing TB indicators and analysis of communication challenges *(Maximum 3 Challenges)*	Desired behaviour or action (make **SMART:** specific, measurable, achievable, realistic & time bound objectives)		Activities	Media / Material Required	Q1	Q2	Q3	Q4	Key implementer and NTEP officer responsible for supervision	Outputs; Evidence that the activities have been done	Outcomes: Evidence that it has been effective	Total expenditure for the activity during the financial year
Challenge 1.												
Advocacy Activities												
Communication Activities												
Social Mobilization activities												
Challenge 2:												
Advocacy Activities												
Communication Activities												
Social Mobilization												
Challenge 3: -												
Advocacy activities												
Communication activities												
Social Mobilization Activities												
											TOTAL BUDGET	

Comments, if any: -

Prepared by: - Signature of DTO

b. Development of Communication material in the districts and pre-testing

Production and development of communication material should focus on identification of material to be developed and its usefulness while being cost effective. However, mere production of material should not be considered as undertaking of ACSM activities.

All material developed should be pre-tested before its bulk production. It is economical to develop material at state level with the help of a professional agency. State and district should work in close collaboration for developing new material for different target audience. For example, posters should be developed keeping in mind the target group, messages, place of use and quality of material. Small quantities of communication material used more frequently are desirable than production of bulk material, which is rarely used.

Material developed should contain few key messages, readable and placed at important locations. The text and images should take into consideration the local cultural context and the language. For example, poster should have 1-3 key messages and should be of good quality so that it is used for a longer period of time. In the same way, leaflets or pamphlets should have few clear messages and few images. The cluttering of messages by putting too much of text should be avoided. For types of material to be produced for different target groups, refer to the table as discussed earlier.

c. Implement ACSM activities as per the action plan

ACSM activities should be implemented as per the action plan. Responsibilities should be fixed at district and sub-district level for organization of these activities. DTO and MO-TCs are to ensure that the activities take place as per action plan. The help and cooperation from district education officer/block extension educator/media officer and IEC officer at the state level may be sought for organization of activities.

d. Monitoring, supervision and evaluation

Regular monitoring and supervision of ACSM activities should form a part of routine supervisory visits. The feedback from the field is critical for modification and or fine tuning of ACSM activities. Regular monitoring and periodic reviews should be conducted to assess the value and utility of campaign. Periodic evaluation should be conducted by an independent agency to evaluate the impact of ACSM activities undertaken.

Guidelines on activities under ACSM

District teams must formulate ways to strengthen the planning and implementation of the programme initiatives listed below reported in the quarterly report on programme.

Management and Logistics (QRPML). All efforts need to be made to ensure that the outcome of the initiatives listed below contribute to the achievement of programmatic objectives including better case finding, treatment adherence, notification etc.

ACTIVITIES	**OBJECTIVE**
Patient Provider Meetings	Patient support and improving case holding/ treatment adherence
Patient Provider Meetings	Patient support and improving case holding/ treatment adherence

Community Meetings	Improving levels of awareness about TB in the community to improve referrals, adherence and address stigma
School-based activities	Improving levels of awareness, referrals
Sensitization of PPs, NGOs, PRIs, Others	For advocacy, building allies for support, additional resources, improving case finding, case notification etc
Outdoor Publicity	Improving levels of awareness about TB, referrals, adherence and addressing stigma etc

1. Patient Provider Meetings

Facilitators: These meetings are organized by the DOT Provider. STS/ Medical Officer are to conduct these meetings. Purpose: The purpose of the meeting is to counsel patients in a group who are on treatment or who are about to begin treatment. This is an opportunity for free interaction between provider and patient and also an opportunity for patients to clarify their doubts, if any.

Target Group: Patients on treatment or who are about to begin treatment. There could be 5-10 patients (minimum) in each such meetings. (If there is large number of patients at one centre, small groups of about 10 patients may be made so that better interaction Takes place between patients and providers)

Place: These meetings are to be organized at the health facility.

Duration and Frequency: These meetings can be organized once a month so that each patient who is on treatment has the opportunity to attend one such meeting during the intensive phase. (Frequency of such meeting would be more than one in a month when the number of patients is large at one health facility) Each meeting can be for half hour to one hour. The patient may be provided refreshments (tea etc.) Kindly note that patient provider interaction meetings are additional to and are different from interpersonal communication that provider has with the patient while administering treatment.

Messages for Patients:

1. Basic information about tuberculosis, cough etiquette etc.
2. Importance of completing treatment
3. Side-effects of drugs and how to manage these
4. Importance of follow up sputum examination
5. Prophylaxis for children in the family
6. Do's and don'ts including protective measures, role of nutritious diet etc.

Health Communication Materials: Flip Book; Banner; Posters on TB etc.

Report writing: At the end of each meeting, a report may be prepared stating date and time of meetings, number of patients, name of facilitators and topic covered along with major concerned mentioned by the patients. The report is to be prepared by the STS. The list of patients who attended the meeting may be attached with the report. It may be more convenient to have register at each centre for such meetings and patients can put their name in the same register.

The STS should indicate organization of these meetings in their tour dairy indicating place, number of patients, presence of MO in the meeting and main points discussed in the meetings. These may be submitted by STS to MOTC on a monthly basis for onward submission to DTO to be included in quarterly PMR report.

2 Community Level Meetings

Facilitators: These meetings are organized by the STS and conducted by the Medical Officer. Purpose: The purpose of the meeting is to create awareness about signs and symptoms of TB, availability of diagnosis and free treatment in the health facilities, availability of good quality drugs under the direct observation of the DOT provider. Provision of drugs, option of community DOT Providers can also be highlighted in these meetings.

Target Group: General public, patients, community leaders/ people's representative including SGHS, NGOs, Community Volunteers, Traditional healers, people practicing other systems of medicine. There should be at least 20-25 people in these meetings.

Place: These meetings are to be organized at the village or block level. These can be organized in the community centre, or any other important place in the community.

Duration and Frequency: These meetings can be organized once a month and each meeting could be for one hour to two hours. The participants may be provided refreshments (tea/ snacks etc.)

Messages for Patients: TB signs and symptoms; availability of diagnosis of good quality treatment in the health facility; location of nearest health facility; provision of drugs in patient; Importance of treatment under direct observation; Importance of completing of treatment; option of community DOT providers.

(These may be given in the form of discussion, lecture. Street play can also be organized followed by discussion and question answer session)

Health Communication Materials: Banner; Posters on TB; Pamphlets; mike; exhibition material; audio visual materials where possible Report writing: At the end of each meeting a report may be prepared stating date and time of meetings, number of persons, name of facilitators and topic covered along with major concerned mentioned by the people. The report is to be prepared by the STS. List of persons who attended the meeting may be attached with the report.

STS should indicate organization of these meetings in their tour dairy indicating place, number of persons, presence of MO in the meeting and main points discussed in the meetings. These may be submitted by STS to MOTC on a monthly basis for onward submission to DTO to be included in Quarterly Report on Programme Management and Logistics (QRPML) or Programme Management Report.

3. School-based Activities

Awareness generation amongst students and teachers of schools and colleges
Regarding tuberculosis.

Steps for organizing school activities:

- Contact the department of school education at state/district level (whichever applicable) to bring them on board in the fight against TB.
- Take necessary approvals to enlist schools and colleges in the district.

- Organize training of trainers (TOT) for school teachers, who can also conduct school activities in a planned and coordinated manner to maximize impact. These can also be done in coordination with the school health programme.
- Display and distribute appropriate support materials like posters/charts/videos/ pamphlets, etc. In local language that may be provided by the state government and for which the prototype may have been prepared by the centre.
- Help the schools utilize the opportunity innovatively by involving students in group activities like painting competitions, dramas/plays, road shows etc.

The initial visit to the school may include simple messages through quiz contests, games, essay writing, drawing and slogan competitions etc. On TB and related issues. Conclude the event with take home messages and how the students can participate in awareness generation; students and teachers can convey TB related key messages to parents, discuss the issue in the Village Health and Sanitation Committee meetings or with prominent people in the community etc. Some token gifts like pen, pencils, key rings, colour boxes, notebooks etc. Can be distributed as prizes to the students.

The subsequent visit to the school/college can be done after 2-3 months to follow up and re-sensitization. Follow up visit should start with a quiz to gauge recall level of the information shared during the previous visit followed by planned activities and distribution of prizes.

In this context, following activities need to be carried out in time bound manner:

- Issue letter with details from STOs to all the DTOs and municipal health officers, with copy to state/UT Education Director and CTD annually
- DTO should ensure the preparation of block-wise enlisting of all the schools and colleges in the district to make sure no government/private school/college is missed out. For this purpose, DTOs can seek help from the District Education Officers.
- Preparation of a detailed district specific action and monitoring plan containing – name of the district and block, name of the school, name of the health functionaries responsible to visit, date of visit, activity planned (specific), resource material required, name of the officials responsible for monitoring (monitoring on random basis covering nearer and remote areas). For this purpose, STS, Axshaya project and CBCI functionaries can be involved. The action and monitoring plan can be developed block-wise. At least 2 school activities should be monitored on monthly basis
- Submission of the district-wise action and monitoring plan by DTOs to the STOs.
- Submission of the state/UT wise action and monitoring plan by STOs to the CTD.
- Activity to be undertaken during the month of Aug/Sep (first visit) and Nov/Dec (second visit).
- Submission of the district-wise report on outcome of the activity (covering both the visits) by DTOs to the STOs.
- Submission of the state-wise report on outcome of the activity (covering both the visits) by STOs to the CTD.

4. Sensitisation of PRIs, NGOs, PPs etc.

Facilitators: These meetings are to be organized by the District PPM Coordinators/STS in consultation with DTO and other relevant cadres at the District and Sub-District levels.

Purpose: The purpose of these meetings/interactions is to create greater awareness about the need for public action on TB and generate specific commitment from target audience on how they would support TB control and care efforts.

Target Group: Elected representatives under the 3-tier Panchayati Raj System, community leaders, SHGs, NGOs, Community Volunteers etc.

Place: These meetings can be organized at the District, village or block level. These may be done individually, in groups or at any other available forums such as IMA meetings, Hospitals/Clinics, NGO forums/offices, Gram Panchayat meetings etc.

Duration and Frequency: Meetings with each of these stakeholders must be organized a minimum one with each group per month. These meetings may be done individually, but it is preferable to do this in groups.

Key Messages:

1. Facts about TB
2. NTEP programme and services
3. The need to support the TB programme for a TB-free India

Health Communication Materials: Banner, posters on TB, pamphlets, exhibition and audio-visual materials where

Possible

Report writing: At the end of each meeting a report may be prepared stating date and time of meetings, number of persons met, name of facilitators and topic covered along with details of any commitments made by any participant. The report is to be prepared by the District PPM Coordinator/ STS. List of persons who attended the meeting may be attached with the report. District PPM Coordinator/ STS should indicate organization of these meetings in their tour dairy indicating place, number of persons, presence of NTEP officials/cadres in the meeting and main points discussed in the meetings. These may be submitted by District PPM Coordinator to DTO and by STS to DTO or MOTC on a monthly basis for onward submission to be included in Quarterly Report on Programme Management and Logistics (QRPML) or Programme Management Report.

World TB Day:

The World TB Day is observed each year globally on March 24. In India, numerous events and activities are organized at national, state, district, and community levels to draw public attention to TB as a major health problem and efforts being made under NTEP for TB care and control. The World TB Day represents a worldwide call to action as well as helps mobilize political and social commitment at the national level. It is necessary to plan it well, to derive maximum benefit. As a major media event, the World TB Day provides a good opportunity to draw attention towards:

1. Good work done under NTEP
2. Local/regional/national TB scenario to inform and emphasize the urgency
3. Role of different sections of society and service providers to bridge gaps
4. Gaps and what more needs to be done
5. Mobilize support of stakeholders and increase commitment from local Leaders/health managers/ administrators to fight TB
6. Attract media attention/coverage to emphasize the urgency of TB control for wider understanding, support, and commitment
7. Co-opt new groups as partners such as businesses, private practitioners etc.

8. NGOs and professional bodies, which are important in the fight against TBPlan for World TB Day at the start of the year while formulating the District Annual Action Plan and PIP.

Essential reading material:

1. Operational Handbook on ACSM for NTEP
2. NTEP Health Communication Strategy

Strategic approach to plan ACSM activities

Strategies are broadly classified in to two groups for greater demand for early diagnosis and treatment, improvement in the health seeking behaviour through empowered community structures and other stakeholders, using evidence-based BCC strategies will be adopted.

For ensuring supply of quality assured diagnosis and treatment, enhancement of political will and commitment of policy makers at national, state and community level will be focused. This will be achieved by effectively engaging with other stakeholders including media, NGOs, patient support groups etc to support advocacy and communication.

The diagram below is an illustration of the broad strategy that would be adopted for designing activities.

Audience based behaviour change			**Involving multiple stakeholders**	**Involving Community**
Increase awareness through addressing issues of: - Correct knowledge - Recognizing signs and symptoms - Modes of prevention & transmission - Early health seeking - DOTS & providers Quality & cost of treatment Adherence to realize efficacy of treatment	- Change in attitude - Stigma reduction - Self at risk perception - Early health seeking - Treatment adherence	- Behaviour change & maintenance - Increase in patient attendance at DMC & PHI - Availability of patient support - Increase in patients successfully completing treatment - Treated patients advocating for DOTS	Involvement of Medical Practitioners Involvement of frontline workers, peer educators, social influencers Involvement of media and Journalists Scale-up ACSM by other agencies following the National Strategy	Involvement of community leaders, AWW, ASHA, teachers, FBO to discuss TB & related issues Development of community initiatives TB Communication materials Involvement of VHSC & VHND for TB Strengthen Involvement of Civil Society for social communication Involving

Section D: Financial management

In this section, participants will learn about: -

1. Introduction
2. Basis of Accounting
3. Accounting Books and Records
4. Financial Statements
5. Accounting Centers under NTEP
6. Functions of

a. State Health Society (SHS)
b. District Health Society (DHS)

7. Maintenance of Funds at SHS/DHS
8. Mechanism of Flow of Funds
9. Basic Fundamentals for preparation of Budget
10. GIA Release
11. Payment Procedures
12. Essential Checks by STOs/DTOs
13. Monitoring by State Health Society
14. Other Key Points

1. Introduction

Financial management means the efficient and effective management of money (funds) in such a manner so as to accomplish the objectives of the organization. It is specialized function directly associated with implementation & management of the programme.

Objectives of Financial Management

- To ensure the availability of timely financial and non-financial MIS.
- To pace up the expenditure within time frame.
- To review the progress of the programme.
- To use resources efficiently, effectively and economically.
- To prepare budget and budget calendar.

Overall financial management comprises of the following activities in sequence

1. Planning & budgeting
2. Accounting
3. Fund flow
4. Monitoring
5. Auditing
6. Procurement

2. Basis of Accounting

- Accounting shall be done on cash basis i.e. a transaction shall be accounted for at the time of receipt or payment only.
- The books of account for the project shall be maintained on the double entry system.
- The accounting period followed shall be the financial year 1st April – 31st March

3. Accounting Books and Records

The following forms and registers shall be maintained by each society:

- Cash/Bank book (for recording transactions relating to the receipt and payment of cash and/or from the bank)
- General ledger (account head-wise summary of transactions)
- Journal
- Register of bank reconciliation.
- Expenditure records through Public Financial Management System (PFMS)
- Petty cash book (for record of receipt and payments from petty cash balances withdrawn from bank for meeting day-to-day and small expenses of the society)
- Stock registers for consumables and printed materials

- Fixed assets register
- Advances register
- Expenditure Control Register (containing approved budget estimates against the annual action plan and expenditure incurred under each head of account)
- Record of Audit and register of settlement of Audit objections.
- Record of utilization certificates received from NGOs

4. Imprest money

- Petty cash imprest can be held in the name of the STO/DTO for day-to-day small cash expenses incurred by the society.
- Petty cash imprest is in the nature of a permanent advance which may be sanctioned to the STO/DTO. The amount of advance should not exceed the monthly average of contingency expenditure incurred in cash for the preceding 12 months and should be fixed on a conservative basis.
- The advance should be recouped once/twice in a month, as required.

5. Financial Statements

- Statement of Expenditure (SOE) on quarterly basis
- Audited Statement of Accounts comprising: -
  i. Audited Receipt and Payment Account
  ii. Audited Income and Expenditure Account
  iii. Audited Balance Sheet
  iv. Audited Utilization Certificate
  v. Audited Bank Reconciliation Statement
  vi. Accounting Policy (as per Financial Management Manual)
  vii. Schedule of Fixed Assets
  viii. Schedule of Outstanding Advances recoverable/adjustable
  ix. Schedule of Sundry Debtors/Creditors (if applicable)
  x. Auditors Report in the Prescribed Format
  xi. Management Letter from the Auditor

6. Accounting Centers under NTEP

The accounting centres are the offices where the basic accounting in respect of expenditure is carried out. These centres are responsible for maintaining the books of accounts, opening and operating bank accounts etc. The Accounting Centers for the Programme shall be as follows:

- Central TB Division (CTD)
- The State TB Cell (STC)
- The District TB Centre (DTC)
- (State Training cum Demonstration Centre (STDC), National Task Force (NTF), Zonal Task Force (ZTF), State Task Force (STF), TB Units (TUs) etc. are not accounting centres)

7. Functions

Financial Management is done through State/District Health Societies

(A) State Health Society (SHS)

Functions

1. Societies have been formed to give autonomy in financial matters and to provide greater discretion, enhanced responsibility, and more ownership to states. Societies undertake activities through "bottom-up approach" in planning and budgeting process, i.e. from DHS (TB)/ -SHS (TB)/CTD and flow and release of funds from "top down approach" from CTD-SHS-STDC/DHS.
2. Responsibility for releasing funds to DHS in the state, monitoring of expenditures and audit reports and also providing statement of expenditures to CTD through NHM.
3. Ensuring the effectiveness of functions including monitoring and supervision of the district activities, conducting review meetings, managing drug stocks and doing financial management.

(B) District Health Society (DHS)

Functions

The main objective of the District Health Societies (DHS) is to implement the NTEP functionally, administratively as well as financially. The government has established the DHS for the following reasons:

1. Decentralized implementation of the programme
2. Improving co-ordination between the government functionaries and non-government organizations at the grass root level
3. Timely preparation of Statement of Expenditure and Audit Reports
4. Reducing bottlenecks for smooth flow of funds

The financial activities of the DHS cover the following areas:

1. Obtaining funds, and materials from the State Governments / Societies
2. Ensuring that the funds, equipment and materials are recorded properly in the books of accounts as per statutory and generally accepted norms and that the same are being utilized appropriately.
3. Reporting to the Central and State Governments on financial performance according to the guidelines specified by the Government of India.

8. Maintenance of Funds at SHS/DHS

a. A separate saving bank sub-account has to be opened and maintained in any scheduled banks for NTEP sub-committee.
b. All funds credited to the society shall be deposited in the bank.
c. Withdrawal from funds including all payments shall be made through ECS (Electronic Clearing System)/crossed cheques/ bank drafts.
d. All cheques shall be signed by any two of the three authorized signatories.
e. Unspent balance after closure of the financial year may be carried forward to the next financial year.

9. Mechanism of Flow of Funds (Grant In Aid- GIA)

Amount of GIA released would depend upon:

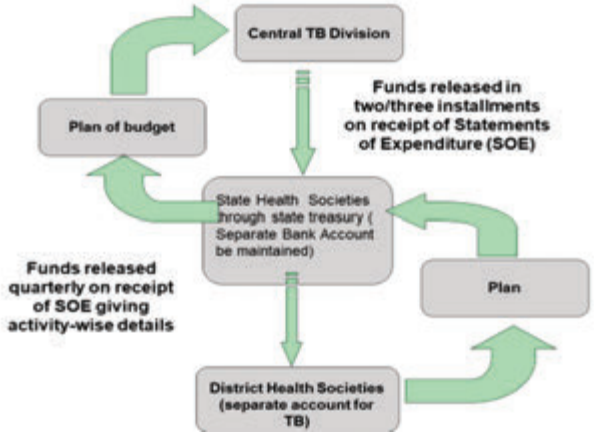
a. Annual Action Plan of the State and Budget allocation by the GoI,
b. Unspent balance available with the state as a whole (including funds in DTCS)
c. Projected requirement
d. Release of State Share
e. Place of utilization of funds released earlier

Funds will be released to the States in two/three instalments through State

Treasury:

a. First Instalment up to 75% of Central Allocation as per GoI approvals on submission of Provisional Utilization Certificate and Financial Management Reports (FMR)/SOE of preceding financial year from the SHS, during the period April-September.
b. Second Instalments will be made during October-March on receipt of Audit Report of the preceding year and SOE/FMR of the last quarter.
c. SHS allocates and releases funds to DHS depending upon their individual performance and requirement on quarterly/six-monthly basis.
d. The State Society shall be responsible for head wise allocation of funds to the District Societies and to ensure that the activities under the programme are implemented smoothly and without any interruption.
e. District Societies will ensure disbursement of funds for various activities and to entities like NGOs, PPs, Medical Colleges etc. as per their intended objectives and action plans. District will monitor the utilization of funds and ensure optimum utilization of funds released to them.
f. The State Society is empowered to reallocate budgetary allocation between the various sub-heads and between the districts. However, revised allocation should continue to comply with the norms issued by the CTD for each of the sub-heads.
g. District Societies can also reallocate the approved budget for each sub-head to the extent of 15% of the original allocation under the recipient head, under the intimation to the State Society. Proposal for reallocation above this limit shall be sent to the SHS for approval.

FUND FLOW IN NTEP



10. Basic Fundamentals for Preparation of Budget

a. Standard norms and guidelines prescribed by CTD should be strictly adhered to.

b. Budget should be prepared for each head for each district, STDC and STC, keeping in consideration the actual requirement and realistic expenditure to be incurred by them and not merely on eligibility criteria.

c. Budget must be prepared for financial year, i.e. from 1 April (current year) to 31 March (next year).

11. Payment Procedures

a. All payments exceeding Rs 1000/- in the case of DTCs and Rs. 2500/- in the case of State Society, shall be made by way of a cheque/demand draft only.

b. Cheque books and counterfoils shall be kept under custody of the STO/DTO.

c. All personal claims including TA should be submitted by the concerned individual within one month of completion of activity

d. All bills/claims which are duly complete in all respects shall be cleared within 15 days from the date these are received at the DTCs/STCs.

e. Ensure that Tax Deduction at Source, wherever applicable, has been provided for, before making the payment.

12. Responsibility of Controlling Officer in respect of Budget Allocation is to ensure that: -

a. Expenditure does not exceed the budget allocation

b. Expenditure is incurred for the purpose for which funds have been provided

c. Expenditure is incurred in public interest

d. Adequate control mechanism is functioning in department for prevention, detection of errors and irregularities

e. Mechanism or checks contemplated at (d) above are effectively applied

13. Essential checks by STOs/DTOs

a. All monetary transactions should be entered in the Cash Book in the prescribed form as soon as they occur duly attested

b. The Cash Book should be closed regularly and checked. At the end of each month the cash balance to be verified physically.

c. In respect of Govt. money paid into the bank, the relevant entry in the Cash Book should be attested unless the bank's receipt on the challan is verified.

d. An account of undisbursed Pay & Allowance should be kept in a register and the amount remaining undisbursed for 3 months should be refunded.

e. For all money received, receipt in the prescribed form should be issued and it should be ensured that such receipt have duly been entered in the Cash Book.

f. All money received in cash or by cheque/demand draft should be promptly paid into bank or sent to the PAO, as the case may be.

g. No expenditure should be incurred without the sanction of the competent authority.

h. All charges actually incurred must be drawn and paid at once and under no circumstances be allowed to stand over to be paid from the next year's budget.

i. No money should be drawn in anticipation of demand or to prevent lapse of budget grant

j. Expenditure Control Register (ECR) should be maintained to exercise an effective check over expenditure against the budget allocation.

k. Expenditure relating to two or more budget/major heads should not be included in one bill and full account classification must be recorded on each bill.

14. Monitoring by the SHS

State Accountant/Accounts Officer at SHS to monitor the financial performance at DHS by field visit to the districts on a periodic basis as per the prescribed check-list (Annexure I).

15. Other Key Points

a. Budget requirements under a particular head for the year should be calculated after taking into consideration the balance from previous year.

b. In case funds are lying unutilized under specific head/s, the same may be reallocated to the other head/s where utilization rate of funds is high. The exercise may be carried out for all districts ensuring that the balance available under respective heads for each district is not more than the 6-month requirement for the district. The amount to be reallocated to a particular head should be calculated after taking into consideration the amount already released under the head for the district so that the total funds available in the current financial year are not more than the eligible amount for the year for the receiving head.

c. Hiring of contractual staff: The State can hire the contractual staff at State/District as per NHM guidelines and sanctioned positions in NSP.

d. The DHSs & SHSs to submit SOEs, Audit Reports and UCs as per the time-lines prescribed by Government of India, not only for timely release of funds to States but also to prefer reimbursement claims in time from the funding agencies by CTD. The UCs should be submitted as per GFR 2017 (GFR 12-A for Autonomous Bodies of the Grantee Organisation and GFR-12 C for State Govt.) (Annexure II).

e. DHSs and SHSs to strictly follow the Internal Control and Internal Review mechanisms as per NHM Guidelines.

f. As per the NHM financial guidelines, single Auditor will be appointed for all the programme under NHM at State/district level and a chapter on NTEP will be submitted separately (separate Audit Report for NTEP). This is to ensure timely disbursement and submission of Audit Report (separate for NTEP) to the funding/donor agencies.

g. All DHSs and SHS to strictly follow the procurement procedures laid down in the Procurement Manual.

h. For the purpose of fund allocation, the States have been classified in terms of size as below:

Large State – Population > 30 million.

Medium State – Population between 10 and 30 million.

Small State – Population less than 10 million.

Section E

Direct Benefit Transfers in NTEP and Nikshay Poshan Yojana

Learning Objectives

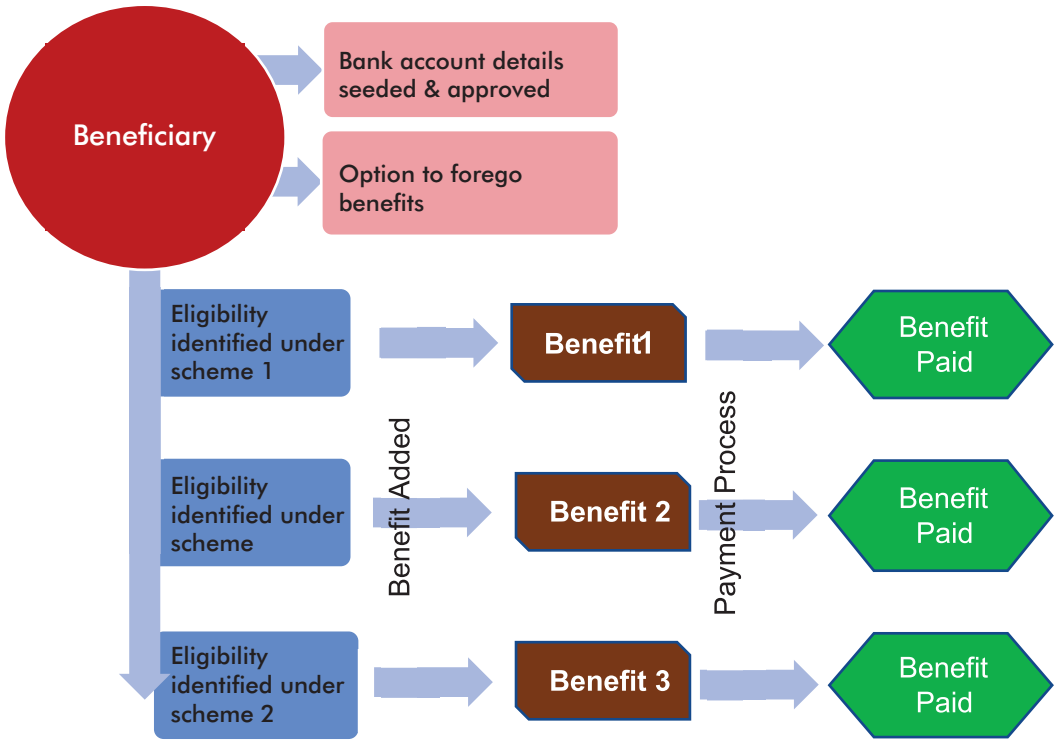
1. Understand DBT.
2. Understand PFMS and the process involved in making DBT payments in PFMS
3. Understand Nikshay-DBT interface and how it takes care of PFMS processes

Direct Benefit Transfer (DBT) is transferring fund/subsidies directly to the beneficiary's bank/post office account. It aims to timely transfer benefit to the citizen by bringing efficiency, effectiveness, transparency and accountability in the Government system. Government intends to achieve electronic transfer of benefits to reduce delays in payments and most importantly, accurate targeting of beneficiaries through DBT.

DBT as a method of effecting payments was launched by the Government of India in 1st of January 2013 and has been scaled up over time. NTEP being a national program needs to comply with this requirement and as far as possible all expenditure has to be made electronically directly to the intended beneficiary using the DBT. Various DBT schemes were initiated in NTEP officially since April 2018.

For the purposes of effecting DBT and monitoring it two terms are defined for all types of DBT:

1. Beneficiary: These are the individuals that get benefitted by payments under a particular scheme. e.g. Notified TB patients are the beneficiaries under Nikshay Poshan Yojana. One beneficiary may be eligible for payments multiple times under a scheme or may be eligible under various schemes. Depending upon scheme rules beneficiaries along with their bank account details may need approval from a district level authority before any of their benefits can be processed.



2. **Benefits:** These are payments made or to be made of a specified amount, as per eligibility criteria under a particular scheme. e.g. A private practitioner (Beneficiary) who notifies 3 patients will be eligible for 3 Benefits for notification (Rs.500 for 1st patient, Rs.500 for 2nd patient, Rs.500, for 3rd patient). Benefits depending upon the scheme rules may be of various amount (e.g. 1000 for patients diagnosed, 500 for PPs who notify, 500 for patients per month of treatment etc). Each benefit can be processed independently (i.e. Send to approver, Approve, Reject, Defer, remove etc) by various users based on scheme rules. Beneficiaries may decide to forego benefits based on scheme rules; personnel who process benefits may also override eligibility identified and may decide not to pay the benefit; in either of these cases benefits are to be "removed" citing the reason for removal in detail.

The Concept of beneficiaries and benefits.

3. **Public Financial Management system (PFMS):** NTEP and all government programs, record expenditure through the PFMS (Public Financial Management system). In addition to documenting expenditure, it also works as a payment system, enabling electronic payment to beneficiaries.

   In PFMS entities that can process payments are called Agencies. Each Agency can to make payments from their bank account(source) to a beneficiary of a particular type, registered in PFMS. So, first the Agency needs to be registered in PFMS and then seed further details including Bank account(source) information from which payments have to be made. One or more bank accounts may be seeded and each can be used for specific purposes in a configurable way. Payment purposes are identified in PFMS as scheme components. Thus, the last step before and agency can make payments to a beneficiary is that, each Scheme component (eg Nikshay Poshan Yojana) has to be mapped to be paid from a source bank account (Scheme Component bank account mapping).

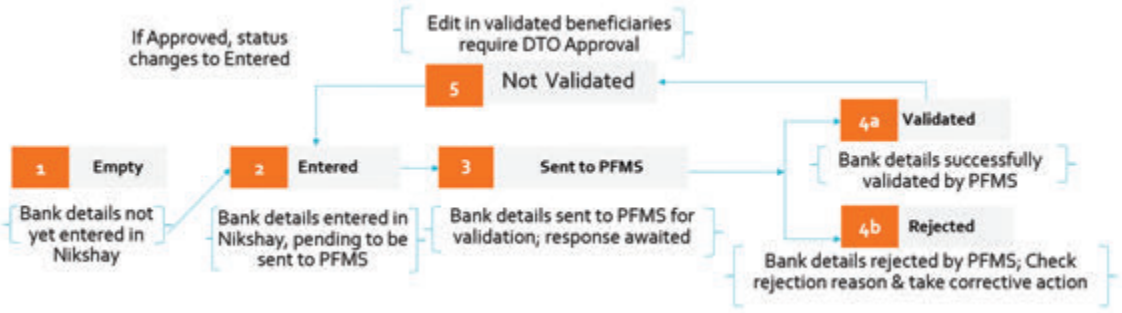
Making Payments using the Nikshay-PFMS interface:

Nikshay being the primary IMS (Information Management System) of NTEP holds a comprehensive record of the beneficiaries and their eligibility for receiving payments under various schemes. Nikshay can interact with PFMS directly for performing DBT for specific scheme components. after performing some preliminary configuration steps in both Nikshay and PFMS (Details regarding PFMS Configuration available in Nikshay Training Materials).

When performing payments using the Nikshay PFMS interface, Nikshay automatically performs three steps (Step 1, 2, and 4), while the step 3 (Payment approval, attestation and submission of payment advice to bank) has to be completed in PFMS.

To process payments in Nikshay following actions have to be done.

1. Beneficiary registration (Bank account and Aadhaar seeding): Across each beneficiary for each scheme, bank account details have to be seeded in Nikshay. Aadhaar details are required to be updated in Nikshay when, the Aadhaar authentication system is available; till such time the Aadhaar details will have to be collected manually. When bank account details are available, Nikshay will automatically register the beneficiary with PFMS within 24hrs. The status of registration is tracked using the Beneficiary Status.



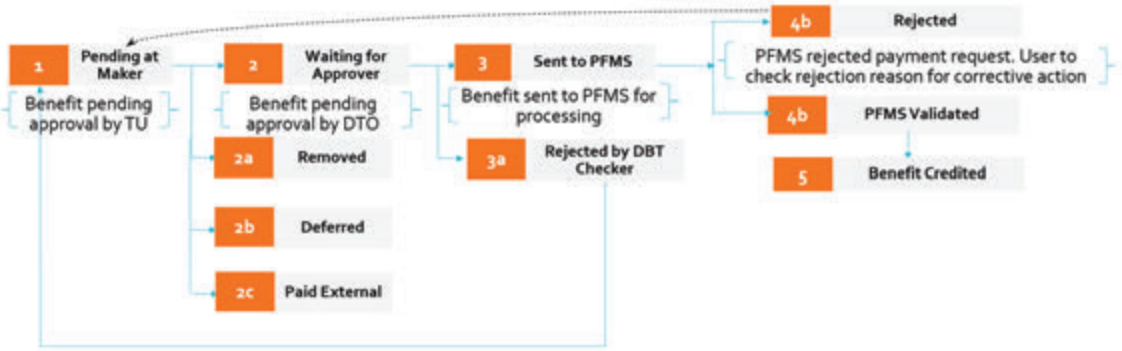
2. **Benefit Processing (Making payments):** Whenever each beneficiary in Nikshay (as defined by the scheme eligibility conditionalities) is eligible for DBT under various schemes, Nikshay will add a new benefit for the particular beneficiary under the scheme. The payment process of each benefit is tracked using the status of the benefit. The following processing steps are to be followed for Benefit processing

a. **Maker Pending (at TU level):** All Benefits created are automatically assigned to the Maker at TU level. The Maker at the TU has to reconfirm the eligibility manually, update necessary details if required, and send the benefit to approver for approval.

b. **Approver Pending (at DTO level):** After the TU sends the benefit for approval, it is available at Approver level for processing. The Approver, after a second verification step (including eligibility and other details) approves the benefit for payment.

c. **Sent & Accepted PFMS:** After approval, the benefit is sent to PFMS as a Request payment. If all the information provided in the payment request is validated by PFMS, its status changes to Accepted. Payment advice may be generated for accepted Request Payments, attested by the relevant authorities and sent to the bank.

d. **Follow up:** Once payment has credited in the beneficiary account, status of the benefit is changed to 'Paid'. Else, if errors occurred in transaction or if transaction was not possible, the payment request will be rejected. All such payment statuses are communicated back to Nikshay and can be followed up within Nikshay.



3. Payment Approval and submission of payment advice: Once the payment request is successfully submitted, then the corresponding authority defined will be able to approve the payment and generate a payment advice either in Print (PPA) or electronically. This is later attested by the relevant authorities; either using physical signatures (for Print), or electronically using digital signatures. This payment advice is to be sent to the bank.

4. Payment Follow-up: Each payment advice needs to be followed up till confirmation is available that all payments have been successfully completed by the amount getting

credited in the patient's bank account. If any payment failure happens, re-initiation of payment has to happen by starting from Request Payment step (Step 2).

For both Beneficiary registration and Benefit Processing, when information is wrong/ invalid in any step of the pathway the PFMS system may reject the registration/ payment request. At the time of rejection, the various rejection code along with its narration will be visible in Nikshay. These beneficiary registrations and Benefit processing cycle has to be reinitiated after addressing the reason for rejection.

Details of the DBT interface in Nikshay and how to perform the above 2 actions are provided in Nikshay Training materials.

(Annexure 1: List of various DBT schemes in NTEP along with related codes)

(Annexure 2: Details of scheme eligibility conditionalities and Benefit generation rules)

NOTE: Only if DBT payment requests are sent to PFMS through Nikshay, shall PFMS provide a feedback regarding the payment status be update to Nikshay. Any payment operations done in PFMS (using DO ID) will not be available to Nikshay and will have to be manually updated as Paid Externally.

DBT Records and Reports:

DBT payments have to be reported and monitored for ensuring that all pending payment has been completed. For those payments that have been processed from Nikshay all reports are automatically compiled using the data already updated in Nikshay, and is available for monitoring. Individual benefit wise information is downloadable as a benefit register. Two reports (Beneficiary and Benefit Status) are available which are flexible to monitor all schemes and is required to be monitored.

1. **Beneficiary Status report:** This report describes the number of beneficiaries identified as being eligible and the status of their registration with PFMS.

2. **Benefit Status report:** This report describes the number of benefits identified as being eligible across a unique number of beneficiaries and the status of these benefits in relation to final credit status in the beneficiary's bank account.

Proof Records to be maintained: Appropriate proofs for each record (bank account details, eligibility, payment etc) will have to be maintained on paper manually and should be producible during supervisory visits and audits.

Newer DBT Schemes:

Over time more DBT schemes may be added in the NTEP program, to encompass all expenditure. As and when these are launched efforts will be made to incorporate them in Nikshay. Till such time these schemes are onboarded in Nikshay, the relevant authorities (State/ District/ Block), will have to ensure that these are paid directly using PFMS (using the Data Operator DO ID of PFMS).

In the case of such payments directly through PFMS, a separate register has to be maintained for such benefit payments. The register needs to include the following aspects

1. beneficiary details, bank account details,
2. the rationale which resulted in eligibility, date on which the eligibility was calculated, amount that was eligible,

3. amount already paid with details, details of payment request made in PFMS with dates and amounts,
4. Payment advice details with dates and when it was submitted to bank and finally the date on which the payment was credited

Different registers are required to be maintained for different PFMS Agencies and for different schemes. For each scheme, Reports have to be calculated manually and maintained as per the above two domains of beneficiary status and benefit status.

Annexure 2:

Scheme Eligibility Conditionalities, Benefit Generation Rules and Processing Algorithm

NOTE: (Please refer to latest updated documents in DBT manuals and Nikshay Training website)

SNo	DBT Scheme Code	FMR Scheme Code	Component Head	PFMS Code	Purpose Code	Amount To Be Paid	Ministries/Department	Scheme Type	Scheme Name	Location Name	Benefit Type	State Contribution in CSS(%)	Scheme Description
1	BOGCU	H.9.2	PPM/NGO Support (RNTCP)	970	• 1402	Rs 500/- Rs 500/-	Department of Health and Family Welfare	Centrally Sponsored Scheme	NIKSHAY - TB Notification incentive for Private Sector	Central	Cash	NA	Private providers who are enrolled in Nikshay data base and who either notify TB case or who manage and subsequently report to the Revised National Tuberculosis Control programme or those providers who simply refer a diagnosed TB patient to the programme will be the beneficiaries. This will encourage notification of Tuberculosis cases and also better management of the cases which otherwise are not known to the programme. Honorarium ranges from Rs. 100 to Rs. 500 depending upon the activity.
2	BF12S	H.3.1 H.3.2 H.3.3 H.3.4	Honorarium (RNTCP)	969	• 1399 • 1400 • 1401	Rs 1000/- Rs 1500/- Rs 5000/-	Department of Health and Family Welfare	Centrally Sponsored Scheme	NIKSHAY - DOT Provider Honorarium	Central	Cash	NA	Beneficiaries are Treatment supporters which can be any individual who is accessible, acceptable to the TB patient and accountable enough to health system can be a Treatment supporter. Who are selected from the community by local health facilities including PHCs, CHCs, district hospitals. These are community volunteers as well as NGOs providing support to TB patients. They are provided honorarium from Rs. 1000 to Rs. 5000 as per category of the case.
3	B1TVH	H.3.5	Honorarium (RNTCP)	1321	• 2769	Rs 1000/-	Department of Health and Family Welfare	Centrally Sponsored Scheme	NIKSHAY - TB Patients (Nutritional Support)	Central	Cash	NA	Beneficiaries are TB patients under RNTCP eligible for Nutritional Support (Rs 500/Month) for the complete course of treatment. As per program division guideline it has to be paid once in two months. So the amount is Rs 1000 per transaction. (at the time of notification, Completion of end IP and completion of treatment)
3	BD8NF	H.18.1	Patient Support and transportation charges	968	• 1398	Rs 750/-	Department of Health and Family Welfare	Centrally Sponsored Scheme	NIKSHAY - Tribal TB Patients	Central	Cash	NA	For every tribal TB patient treated under Revised National TB Control Programme (RNTCP), Rs 750 may be given as cash to meet out of pocket expenses.

Annexure 2:

Scheme Eligibility Conditionalities, Benefit Generation Rules and Processing Algorithm

NOTE: (Please refer to latest updated documents in DBT manuals and Nikshay Training website)

Scheme I: Nikshay Poshan Yojana / TB patient (Nutrition)

Eligibility conditionalities:

1. Paid for all Notified TB patients @500Rs. Per Treatment month
2. First payment (Rs. 1000) to be paid at the time of Notification as advance and is not conditional to initiating treatment.
3. Advance payment is required to be is to be settled at the time of outcome declaration.
4. To reduce number of transactions, payments may be effected in instalments of Rs.1000 for two months.

Benefit generation: (by Nikshay)

1. Benefit generation at Notification (Incentive 1): Generated by the system within 24hrs of Notification. Benefit Amount added is Rs.1000. This benefit will be considered as advanced and will only be adjusted when a patient completes the treatment.

2. Subsequent Benefit generation (Incentive 2 and onwards): Generated on a 28-day cycle. For all patients on treatment and whose treatment period has crossed blocks of 28 days (Treatment initiation date to current date), benefit amount added is based on a calculation [(Rs. 500/ X number of 28-day blocks) - (Amount in existing benefits other than incentive number 1)]. For all patients who have completed treatment and outcomes have been declared then the amount added is based on a calculation (Rs. 500/ for X number of 28-day block between treatment initiation and outcome date) - (Amount in all existing benefits)].

3. Deferring and readjustment of benefits: Subsequent benefits may be deferred so that in the next month existing benefits and new ones could merge into one benefit. In the next 28 day cycle any existing benefit that is deferred will merge into the benefit to be created. When each subsequent benefit is created the system reassess the amounts in existing benefits and also when Outcome is declared. When outcome is declared all benefits are reassessed and the advance amount paid at notification is re-adjusted.

   NOTE: Benefits will be generated in Nikshay in as instalments of Rs. 500, and may be required to club two benefits into one by recalculating the eligible amount. Additionally, while processing benefits, since amounts are paid in advance and Nikshay is unable to reliably predict when treatment will end, and till such day the outcome is declared Rs. 500 OR Rs.1000 extra benefit will exist in the system and will require recalculation. In both these conditions where recalculation is required, the benefit is needs to be 'deferred'. Once recalculation happens, the benefit will be returned back to the maker (TU) automatically.

Scheme II: Tribal TB patients

Eligibility conditionalities:

- Patient notified from or currently resides in a Notified Tribal Block

Benefit generation: (Triggered by User)

- Benefits will be generated at TU level for Patients currently in Notified Tribal Blocks from patient management interface

Scheme III: Treatment Supporters Honorarium

Eligibility conditionalities:

1. Treatment supporter has to be registered in Nikshay and designated as primary Treatment supporter
2. Linked patient has to complete treatment or has to be cured
3. Treatment supporter should not be a salaried Government Employee

Benefit generation: (Triggered by User)

- From Patient management interface of an outcome (Cured/ Treatment completed) declared patient.

Scheme IV: Private Provider HF incentives schemes.

Incentives of Rs. 500 for the purpose of Notification and outcome declaration, and referral for diagnosis to public sector(informant) will be provided to private healthcare providers (HF)

Eligibility conditionalities:

4. Registered private health care providers are those who notify, or provide outcomes or refer patients to the public health system.
5. Providers have to have bank details seeded in Nikshay, beneficiary details approved by the DBT Checker and finally has to be PFMS registered as a onetime activity
6. For being eligible for incentives other than for notification (outcomes, NPY), the private providers or their staff has to login to Nikshay and themselves refer patients/ declare the outcomes for their patient.

Benefit generation: (Triggered by User)

Benefits are autogenerated by Nikshay and flows through the standard process of DBT maker and checker for approval.

Section F

Patient support for TB Elimination

In this module we will learn about various social protection models and systems available to the citizens, from the program and society in general, to obtain effective preventive and curative TB care and support.

The following will be discussed in this chapter.

1. Treatment Support
2. Adherence support strategy
3. Nutritional Support
4. Mitigating catastrophic expenditure (such as those provided through DBT)
5. Airborne infection control in Community and Facility
6. Patient help desk and grievance redressal.
7. Social support models from various states

These are not meant to be exhaustive or an exclusive list of activities required, but are meant to give an understanding of support systems that have been put in place nationally and case studies of contextual innovations. These local examples have mobilized social support to strengthen program activities. Different contextual situations demand improvisation, innovation, planning and the implementation of locally appropriate solutions.

Treatment Support

Objectives of treatment support:

1. Minimize delay in treatment initiation and follow-up, infectivity and travel
2. Maximise adherence by an adherence support strategy including
    - Monitoring & reporting dose administration
    - Support for preventing treatment interruption (including retrieval action, support for ADR, nutritional support, linkage for comorbidity care, substance abuse etc.)

    Treatment support is not applied to all patients at all times in a uniform fashion. Some patients may not need additional support other than diagnosis and treatment. On the other hand, some may need a more intensive 360 degree support, including social, nutritional, financial residential support, special support for management of substance abuse, comorbidity etc.

Even though the patient needs support, s/he may not request it, or be aware that such support could be availed through the healthcare system. Hence the need for support should be assessed and process of providing support initiated by the health system. Sometimes the need will be beyond the health system. In such situations, health system personnel should be able to link the patient to appropriate sources of support. There are successful examples in many states for such coordination that resulted in increase in favourable outcomes.

To achieve the above-mentioned objectives of treatment support, at the time of diagnosis, a good treatment support plan should be developed by the doctor in consultation with the patient and the relevant health staff. This plan should include:

1. Scheduling a home visit for counselling of the patient and family members
2. Follow-up schedule at PHI with Medical Officer and for laboratory investigations
3. Linkages for co-morbidity management including assessment of nutritional support requirement
4. Adherence support Strategy (retrieval of treatment interrupters, screening for adverse reactions, psycho-social support) and Supervision of patient and treatment supporter

Components 1-3 have been covered in the treatment module. The 4th component of the treatment support plan, Adherence support strategy is discussed here.

Adherence Support Strategy

Tuberculosis, including the drug-resistant forms are completely curable with early detection and complete treatment. However, even the "short course" chemotherapy for TB might not be perceived as short by the patient. Treatment of DR-TB, poses an even greater challenge due to its longer course.

Adherence to regular and complete treatment is the key to relapse free cure from TB. To assess and foster adherence, a patient-centred approach to administration of drug regimen, should be developed for all patients. Based on the patient's needs and mutual understanding between the patient and the provider the appropriate adherence support strategy should be followed.

The Adherence support strategy includes three components.

1. Adherence monitoring.
2. Action for addressing treatment interruptions.
3. Multi-level monitoring and supervision

1. Adherence Monitoring

Broadly there are three methods to monitor adherence that may be applied in combination at varying frequencies as required.

a) Refill monitoring (per issue of drugs)- Includes checking whether the patient has accessed a refill before the previously dispensed medicines got consumed (based on previous drug issue). This is required in all patients, but not recommended as the only monitoring method. It is to be combined with any of the other two methods.

b) ICT enabled self-reporting of dose administration- using tools such as 99DOTS, MERM etc. (per dose administered). Specific instructions/training are available for each technology (Refer Nikshay Training materials). This method at the beginning of treatment allows staff to prioritise patients to be visited and counselled and empowers patients to be able to take charge of their own treatment. The choice on the type of technology has to be based on a number of factors and has to be agreed upon by the patient and healthcare provider. There may also be a need to switch technologies whenever the patient appears to be less comfortable/ self-reporting poorly on one technology; or may also need to be switched to a totally manual method as Direct Observed Therapy.

c) Direct Observed therapy (per dose taken)- This includes consuming the drug under Direct Observation and also verifying that drugs since the last observation point till today have been consumed.

It is recommended that all patients at the initiation of treatment, should be put on monitoring method which includes a combination of monitoring methods at a frequency as below.

- ICT enabled self-reported dose administration (Daily)
- DOT (3 times a week)/ (daily if self-reporting is not possible)
- Refill monitoring (weekly drug issue)

If the patient belongs to the private health sector, the treating doctor is the treatment supporter. However, the public health system may offer their supportive role when requested.

Based on how well the patient is able to adhere to treatment the above monitoring methods may be relaxed or made more intensive such that treatment adherence is ensured. Such change of intensity may happen as and when required based on discussion with the patient and the treating physician.

Quality of DOTS implementation:

- number and percentage of patients started on NTEP DOTS within seven days of diagnosis,
- number and percentage of patients notified within a day of diagnosis as TB Patient,
- number and percentage of cured microbiologically confirmed cases having end of the sputum follow up examination within one week of the last dose and
- number and percentage of patients receiving DOT through community volunteer are recorded.

These are the important points to be considered when evaluating the implementation of DOT, an indispensable component of patient support and quality of treatment, in the field.

2. Action for addressing treatment interruptions

When treatment interruption is observed for the first time, action should be taken by the treatment supporter to enquire about the reason for interruption and action taken to address the same. Actions include measures such as re-training on using the ICT enabled monitoring system, counselling, referring to medical officer for adverse events, adjustment of the treatment monitoring method re-supply of drugs etc.

It should be ensuring that action should be taken within 24 hours of treatment interruption. If not resolved the issue needs to be escalated to the MOPHI & STS, and then to the MOTC and district level staff.

Direct observation of treatment creates additional opportunity for the health system to engage with the patient, to assess treatment progression and need for any additional support. It is also a tool to prevent Drug Resistance. However, the Direct Observation is to be applied logically and judiciously; the treatment supporter performing DOT should be acceptable to the patient and accountable to the health system. For example: A patient who is genuinely unable to undergo supervised treatment should not be denied treatment. Frequent on-job travellers, truck drivers, sailors etc may require a different type of treatment supporter (for example cleaner/ assistant for a truck driver or family DOT/ treatment supporter etc). Inability of the health system to identify such appropriate treatment supporter, should not result in the denial of treatment to a patient.

3. Multi-level supervision and monitoring

Each patient and his/her treatment supporter should be supervised by a health worker and in turn by the PHI MO. At TU level and upwards regular monitoring of adherence data should be conducted and PHIs, TUs and districts where adherence is sub-optimal should be prioritised for supervisory visits, issues identified and necessary actions to improve performance should be taken.

Treatment support for detection and management of ADRs

Adverse drug reaction (ADR) is a major cause for fatality and loss to follow-up. Patients should be carefully watched to detect and manage ADRs at its onset. Nodal Clinician and DR-TB Counsellor should educate the patients on potential adverse reactions, their signs and symptoms, necessity of timely reporting and their recording in the ADR section of treatment book. The STS responsible for supervision of the patient at home should actively search for signs and symptoms of ADR on every visit. Additionally, they need to keep in touch with the patient over phone to actively enquire for ADRs. Patient should be encouraged to report even the mildest symptom and record them in the ADR diary. On self-reporting by the patient or on elicitation by health worker, the MO PHI/treating physician should clinically examine and investigate for the cause. Some of the ADRs like a drug induced gastritis or itching might be mild and managed at the PHI level. Moderate or severe forms of ADRs such as toxicities to liver, kidneys or nervous system, psychiatric abnormalities may warrant stopping of drugs and referral to the DR-TBC immediately. The MO should fill a referral for the treatment form with detailed history of the ADR and refer the patient with advance intimation to the nodal clinician and DR-TB Counsellor. Based on the ADR management guidelines, modifications in the present regimen may be made at the DR-TBC.

Once the patient is referred back, the MO PHI should ensure that the patient has understood the modifications and educate the treatment supporter for the same. DTO needs to review ADR management at PHIs during the district review.

Nutritional support

All individuals with active TB should receive

(i) an assessment of their nutritional status and

(ii) appropriate counselling based on their nutritional status at diagnosis and throughout their treatment.

(iii) If malnutrition is identified, it should be managed according to WHO recommendations. Linkages for extra nutritional support for TB patients or of his/her contacts on IPT may be explored with existing Govt. schemes like public distribution system (PDS) or Food security act.

Early detection of drug resistance through rapid diagnostics and early initiation of treatment favours good prognosis. Adverse drug reactions, comorbidities, social neglect and catastrophic expenditures are major deterrents to successful treatment completion and relapse-free cure. A patient-centric approach ensuring adequate medical, social, psychological and nutritional support is essential for good quality of life. These supports are to be built into a well-tailored treatment support programme customized for each DR-TB patient.

More details regarding Nutritional Assessment, supplementation and provision of Nutritional Support are covered in Guidelines for Nutritional Care & Support for TB patients in India.

Mitigating catastrophic expenditure

Citizens seeking TB diagnostic and TB patients face a significant risk of catastrophic expenditure. As per the END TB Goals reduction of catastrophic expenditure is an important goal. Expenditure may be incurred by the patient when they seek diagnostic and treatment related care, loss of wages due to inability to earn and also due to death and Disability.

Under the program and through partnerships the program is attempting to reduce catastrophic expenditure by the following means.

1. Free TB diagnostic and treatment services extended to even the private sector
2. Financial support to patients and care providers through DBT
    a. Nutritional Support
    b. Treatment support to Tribal Patients
    c. Travel support
    d. Private Practitioners incentives
    e. Treatment supporters Honorarium

Despite these financial supports, the patient may face additional expenditure depending upon the situation of the individual. Different states and locations have found local solutions to supplement the above and fill the gap where the program is unable to. These includes measures like linkages to Government schemes (such as RSBY, TB pension schemes, national rural employment guarantee scheme) that TB patients can specially utilize, state specific schemes for TB patient welfare and voluntary support from peers and community (such as CSR Initiatives).

The specific details of each financial support scheme available to patients and their providers and its operational guidelines are discussed in the DBT module and its annexures.

Support for airborne infection control

Principles of good TB management include early detection, appropriate treatment and practice of infection control measures. All TB patients should receive counselling on prevention of airborne infection at home and at work place.

Airborne infection control measures should be implemented in Health Facilities, Community, and at household level.

In health facilities measures such as increased ventilation, reduced crowding, faster processing of patients' and samples (fast tracking), wet mopping, cough etiquette should be implemented to reduce the change of infection being spread between people that attend the clinics.

To reduce the risk of airborne TB infection to get transmitted between patients and their family members/ close contacts, patients should be educated on the specifics of cough hygiene. Patients should be provided with spittoon, disinfectant and reusable masks and educated on their use. During house visits, the peripheral health workers should observe patient practicing cough hygiene and reinforce AIC messages.

Detailed description of AIC measures to be implemented provided in the Guidelines for Airborne infection control.

Patient help desk and grievance redressal.

At all service delivery levels there are possibilities where the patient needs may not be adequately addressed. Patients can now provide such feedback and report grievances to the system through help desk mechanism. These can be submitted to the DTO on paper or email or through the National Call Centre (Nikshay Sampark).

When a query or grievance from a patient is received, the District TB officer should categorize it based on the level at which the feedback is related and whether it needs action or not. Even if it does not require action, the message should be responded to. If it needs further action, the DTO must assign a competent authority to investigate, or address the request/grievance along with a suitable time to review it. All feedback should be registered to a central registry. If the request/grievance is not addressed at a particular level it will be escalated to the next higher level. At all critical points, the patient should be informed of the status of his/her submission and have the ability to confirm that the grievance has been addressed. The turnaround time of various types of grievances and successful resolution should be monitored and included as a part of the quality assessment of TB care in the country

Annexure : ICT Enabled Adherence monitoring methods

I. 99DOTS (Mobile based "Pill-in-Hand" reporting): -

In this system, each time a patient opens a tablet of medication, a hidden number, printed on the blister pack sleeve is revealed. The patient needs to send a call to a Toll-Free number, with the hidden number on drug package. A call from the registered mobile number of the patient with the correct hidden number will be documented and updated against the patients' adherence record in Nikshay.

The sequence of hidden numbers cannot be predicted by patients, but are known by the system for each month of medication prescribed, the system offers high confidence that patients who respond correctly have indeed dispensed their medication.

When the call is not received by 3:00 in the afternoon, a reminder through SMSs is sent to the patient. If the patient still does not consume medications, the issue is escalated up the authority chain till corrective action is taken. Simultaneously, S/he can also be remotely followed up with help of Call Centres or using an Interactive Voice Response (IVR).

99DOTS training material is available on website (99DOTS.com)

II. Medication Event Reminder Mechanism (MERM) Box:

These are Specially designed electronic pill boxes with mobile connectivity and sensors can be used to monitor the pill consumption by tracking whether the box has been accessed during the treatment day

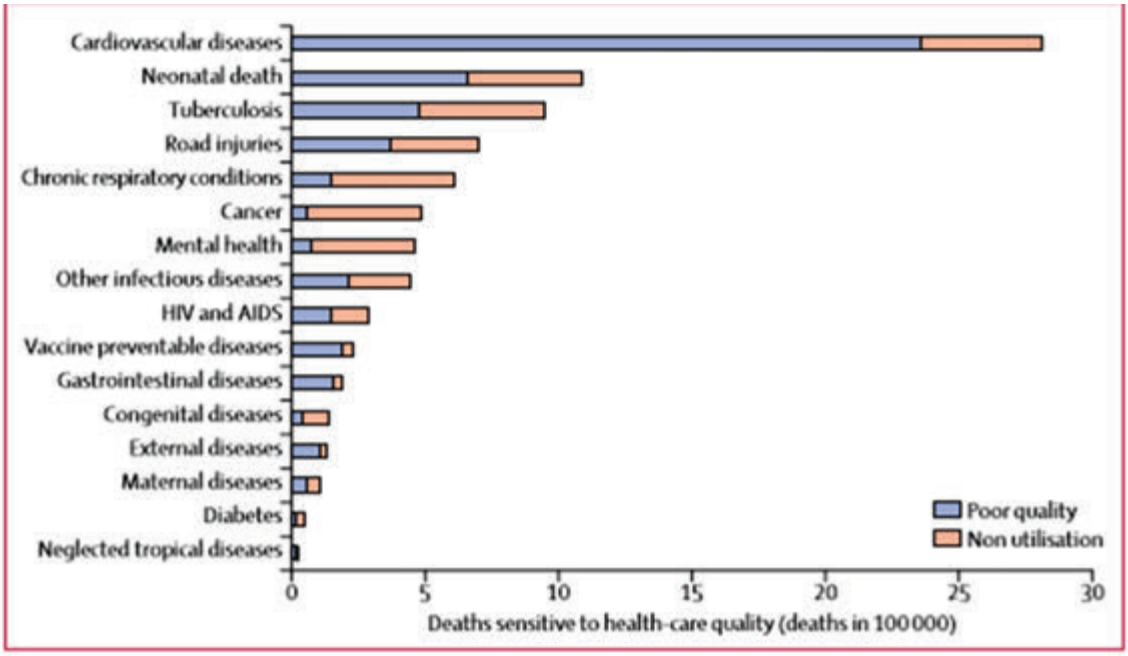
A Short Messaging service (SMS) gateway to be made available by which the patient can report day to day events like pill consumption, minor side effects or his need for help through simple and shortcut SMS templates. The gateway can allow incoming services in pre-recorded or Interactive Voice Response (IVR) mode to inform patients about their test results, as follow up reminders and as periodic counselling messages.

Section G: Quality of service delivery

Quality of service delivery from patient's perception is mostly about the services that he is getting. It also includes the program delays which will jeopardise his perception regarding the services that he is receiving and finally leading to worsening of the disease. DOT is one of the important components of quality of services delivered in the TB program. The other components are being discussed here in this chapter.

TB is one of the diseases that is highly quality sensitive. It appears as the third among all the diseases next to cardiovascular diseases and neonatal deaths. In-spite of providing all the materials, funding and the trained manpower we may not be able to ensure the full effect if the quality of care is poor. By providing a good quality care for TB patients we will be able to increase the efficacy of the TB care services.

Poor quality versus non-utilisation of health care- affecting patients



The first WHO guidelines on how to review a TB programme were published in 1998, and were designed to support the assessment of, and improvements to, the implementation of the DOTS strategy. Since then, there have been major evolutions in the WHO strategy for prevention, care and control of TB. Important new interventions have been defined, developed and implemented: for example, collaborative TB/HIV activities and the programmatic management of drug-resistant TB.

Reviewing the performance of the individual thematic area of a national TB programme provides an important opportunity to assess the implementation of interventions to fight TB that have been defined in national policies, the quality of TB care and control services, and the progress that has been made towards reaching the programme's targets.

Objectives

I. To provide quality assured services under the programme
II. Train programme managers to ensure that quality services are provided to the patients
III. To monitor the above services with respect to quality
IV. To identify areas where quality is compromised/ challenges
V. To take remedial measures /potential solutions
VI. To identify best practices

Existing inbuilt mechanisms

a. Customized treatment supervision and patient support

- Traditionally, treatment supervision methods were limited to direct observation of therapy (DOT) by a trained person other than family members.

- Move to a patient-centric approach would mean giving more priority for patient's needs and preferences in view of better adherence in such a way that ethics and standards for DOT are met.
- In some patients, a family member might be able to ensure better treatment supervision and adherence as compared to an external individual visiting the home e.g., child or a bedridden patient.
- With the development of information communication technology (ICT), there are options by which patients can reliably self-report drug consumption, be monitored and supported by various levels simultaneously.
- The newer guidelines favour the principle of adherence monitoring which has to be applied logically and judicially. These also provide options, whereby, the most appropriate modality of adherence monitoring may be used as a collective decision for the patient, treatment supporter and the Medical Officer (MO).
- The necessity for supporting patient needs related to TB care in addition to treatment is increasingly being recognized.

b. Provision of specimen transportation system borne from the relevant budget head of the patient support system

c. All TB patients should receive counselling on prevention of airborne infection at home and at work place

d. Patient helpdesk

- At all service provision levels there are possibilities where the patient needs may not be adequately addressed. Patients should provide such feedback in the form of a help request or query to the system through a help desk mechanism. These can be submitted to the DTO on paper or email or through a website or ICT when available.
- Once such feedback is received, the District TB officer should categorize it based on the level at which the feedback is related and whether it needs action or not.
- Even if it does not require action, the message should be responded to. If it needs further action, the DTO must assign a competent authority to address the request/grievance along with a suitable time to review it. All feedback should be registered to a central state-wise registry.
- If the request/grievance is not addressed at a particular level it will be escalated to the next higher level. At all critical points, the patient should be informed of the status of his/her submission and have the ability to confirm that the grievance has been addressed.
- The turnaround time of various types of grievances and successful resolution should be monitored and included as a part of the quality assessment of TB care in the country.

e. Patient Charter

f. Provision of quality assured diagnostics & drugs

g. Call centre approach with a gamut of services

Approaches to assess quality

a. Complaint box

b. Feedback mechanism

c. Helpdesk
d. Providing information on escalation level
e. Call Centre Approach
f. Grievance redressal mechanism
g. Time delay in different services including the delay in the grievance redressal.

Indicators to monitor quality of services

a. No. of complaints received during the month
b. No. of feedback received from the patients during the month
c. No. of patients/ relatives approaching the helpdesk
d. Whether the information on escalation level displayed at the service delivery centre
e. No. of patients approached the call centre from a facility/ area
f. No. of grievance received & processed within one month& average time taken to resolve the same
g. Time delay over and above the accepted lead time, depending on technology and quality of services, of different services

Every contact of the patient with the programme and every service that is offered to the presumptive and diagnosed patient should get recording of the date and time of the event.

Even the General OPD services that are functioning in every state should get digitised for assessing the quality of care related to the time taken for the services.

We have to have an effective fast-tracking mechanism at every OPD with the help of a dedicated Quality Supervisor, either from the General health services or NTEP e.g., cough nurse, for helping this activity.

MODULE 6

PROCUREMENT, SUPPLY CHAIN MANAGEMENT & PREVENTIVE MAINTENANCE

Introduction

Timely procurement and uninterrupted supply of medicines & other consumables is one of the important requirements for the successful implementation and sustainability of the Programme. Procurement, storage, maintenance of stock and in-time distribution of anti-TB drugs & other materials are essential for quality services under Revised National TB Control Programme. One of the most important tasks is to make sure that all health facilities have the adequate stock of drugs and consumables. Monitoring of drug supply from centre to PHI level through a web-based real time software i.e. Nikshay-Aushadhi, to avoid any shortage and expiry of medicines.

Learning objectives

In this module participants will learn the roles and responsibilities of program manager at each level in Procurement, Supply Chain Management, Logistics and Preventive maintenance as mentioned below:

1. Procurement and Supply Chain Management of Anti TB drugs
2. Supply Chain Management of other items
    I. Treatment-related supplies
    II. Diagnostics
    III. Stationary & Printing
3. Preventive maintenance of vehicles & other office equipments etc.
4. Supervision & Monitoring of TB Medicines
5. Nikshay-Aushadhi (NA)

1. Procurement and Supply Chain Management system of Anti TB drugs under NTEP

A strong procurement and supply chain management with respect to drugs is essential to strengthen every link in the drug supply chain, from manufacturer to patient for an uninterrupted supply of quality Anti TB drugs under the programme. In India NTEP provides quality drugs to all the diagnosed TB patients without any interruption. Under NTEP, 1st line drugs are being provided in monthly blister strips of Fixed Dosage Combination (FDC) for Drug Sensitive TB patients according to their weight-bands. For drug resistant TB patients, drugs are provided in monthly boxes depending upon their weight-band and resistance pattern (Mono-resistance, poly-drug resistance, Multi Drug Resistance, Extensive Drug Resistance).

An efficient drug supply chain system should ensure:

- Continuous availability of quality anti-TB drugs
- Maintenance of adequate drug stocks at all levels
- Prevention of expiry of drugs at all levels
- Effective timely transportation of drugs
- Proper maintenance of drug record
- Quality of drugs throughout its shelf life
- Safeguarding against pilferage

An effective Procurement & Supply Chain Management system encompasses the activities:

1.1 Selection:

The essential first line drugs used in the Revised National TB Control Programme are: Rifampicin, Isoniazid, Ethambutol and Pyrazinamide. In NTEP, 2ndline drugs are used in monthly patient wise boxes (Type-A & Type-B) for the different weight bands. Loose anti TB drugs are also used in the programme. E.g., adverse reaction, modification of boxes/ regimen etc

1.1.1. 1st Line Anti TB drugs -

(a) Adult & Paediatrics anti TB drugs - FDCs (DSTB-IP/CP)

Sl. No.	Product Code	Product Description	Drug & Strength	Dosage
1.	DSTB-IP (A) 4FDC	Schedule 13 is a blister pack of 28 tablets, each tablet consisting of Isoniazid, Rifampicin, Pyrazinamide and Ethambutol in fixed dose combination (HRZE-Fixed Dose Combination).	Each FDC Tab contain - Isoniazid IP 75mg Pyrazinamide IP 400 mg Ethambutol Hydrochoride IP 275 mg Rifampicin 150 mg	As per weight band
2.	DSTB-CP (A) 3FDC	Schedule 14 is a blister pack of 28 tablets, each tablet consisting of Isoniazid, Rifampicin and Ethambutol in fixed dose combination (HRE-Fixed Dose Combination)	Each FDC Tab contain – Isoniazid IP 75 mg Rifampicin IP 150 mg Ethambutol Hydrochloride IP 275 mg	As per weight band
3.	DSTB – IP (P) 3FDC	Schedule 15 is a blister pack of 28 dispersible tablets of Fixed Dose combination of Isoniazid, Pyrazinamide & Rifampicin	Each dispersible FDC Tab contain – Isoniazid IP 50 mg Rifampicin IP 75 mg Pyrazinamide 150mg	As per weight band
4.	DSTB-CP(P) 2FDC	Schedule 16 is a blister pack of 28 dispersible tablets of Fixed Dose combination of Isoniazid & Rifampicin	Each dispersible FDC Tab contain – Isoniazid IP 50 mg Rifampicin IP 75 mg	As per weight band

Note: Ethambutol should be given separately for Paediatric TB Patient as per the appropriate weight band.

(b) Drug Dosage for ADULT DSTBB-IP (A) 4FDC

Weight category	Number of tablets (FDCs)		Inj. Streptomycin (when used)
	Intensive phase	Continuation phase	
	HRZE	HRE	
	75/150/400/275	75/150/275	gm
25-34 kg	2	2	0.5
35-49 kg	3	3	0.75
50-64 kg	4	4	1
65-75 kg	5	5	1
>75 kg	6	6	

Note: Adult weighing less than 25kg will be given loose drugs as per body weight.

©) Drug Dosage for PEDIATRIC DSTB

Weight Category	Number of Tablets (FDCs)			
	Intensive Phase		Intensive Phase	
	HRZ	E	HR	E
	50/75/150	100	50/75	100
4-7 kg	1	1	1	1
8-11 kg	2	2	2	2
12-15 kg	3	3	3	3
16-24 kg	4	4	4	4
25-29 kg	3 + 1A	3	3 + 1A	3
30-39 kg	2 + 2A	2	2 + 2A	2

A=Adult FDC (HRZE=75/150/400/275;
HRE=75/150/275)

(d) Isoniazid Preventive Therapy (IPT)

(I) Chemoprophylaxis: Children are more prone for severe disseminated form of Tuberculosis and children aged 5 years or less who are close contact with TB patient should be given Isoniazid prophylaxis after ruling-out active TB by paediatrician or medical officer. It should be given irrespective of BCG/Nutritional status. The dosage of INH preventive therapy is 10mg per kg body weight administered for 6 months. Loose tablets of Isoniazid 100 mg are supplied by CTD based on the district/state requirement submitted through Nikshay-Aushadhi.

(ii) For PLHIV: INH Preventive therapy should be considered in following situation:

- For all HIV infected children who either had a known exposure to an infectious TB case or are tuberculin skin test positive (>=5mm induration) but have no active TB disease.
- All TST positive children who are receiving immunosuppressive therapy (e.g. Children with nephrotic syndrome, acute leukaemia, etc.).
- A child born to mother who was diagnosed to have TB in pregnancy should receive prophylaxis for 6 months, provided congenital TB has been ruled out. BCG vaccination can be given at birth even if INH preventive therapy is planned.

The requirement of Tab Isoniazid and Pyridoxine for IPT is supplied by CTD based on the requirement from NACO.

(e) Requirements of loose drugs for indoor patients:

In case of loose drugs requirement for indoor patients, drugs can be obtained from the concerned DDS, based on actual consumption and requirements submitted through Nikshay-Aushadhi.

1.1.2 2nd Line Anti TB Drugs-

The State/ SDS supplies only loose form of second-line anti-TB drugs (SLD). The SDS/DDS repack the loose drugs into one-monthly patient-wise boxes of Type A (oral drugs common in IP and CP), Type B (IP Plus boxes) and supplies to districts/TUs/PHIs for treatment.

SDS/DDS shall be preparing 'standardized drug boxes' for standard regimen and supplies to districts/TUs/PHIs, namely for shorter MDR/RR TB regimen, conventional MDR-TB regimen and regimen for H mono/poly DR-TB. SDS shall supply additional loose quantity of SLD to districts for constituting modification in boxes.

The patient on intensive phase (IP) shall be put on Type A and Type B boxes in each month. During the continuation phase (CP), the patient will be put on only Type A box for the entire duration.

(a) Drug dosage of DR TB drugs for Adults patients:

Sl.No	Drugs	16-29 kg	30-45 kg	46-70 kg	>70 kg
1	Rifampicin(R)[1]	300mg	450mg	600mg	600mg
2	High dose H (H^h)	300 mg	600 mg	900 mg	900 mg
3	Ethambutol(E)	400 mg	800 mg	1200 mg	1600 mg
4	Pyrazinamide(Z)	750 mg	1250 mg	1750 mg	2000 mg
5	Levofloxacin(Lfx)	250 mg	750 mg	1000 mg	1000 mg
6	Moxifloxacin (Mfx)	200 mg	400 mg	400 mg	400 mg
7	High dose Mfx (Mfx^h)	400mg	600mg	800mg	800mg
8	Bedaquiline (Bdq)	Week 0–2: Bdq 400 mg daily Week 3–24: Bdq 200 mg 3 times per week			
9	Linezolid (Lzd)	300 mg	600 mg	600 mg	600 mg
10	Clofazimine (Cfz)	50 mg	100 mg	100 mg	200 mg
11	Cycloserine (Cs)[4]	250 mg	500 mg	750 mg	1000 mg

12	Delamanid (Dlm)	50 mg twice daily (100 mg) for 24 weeks in 6-11 years of age 100 mg twice daily (200 mg) for 24 weeks for >11 years of age			
13	Imipenem/cilastatin (Ipm / Cls)[4]	1000 mg imipenem/1000 mg cilastatin twice daily			
14	Meropenem(Mpm)[4]	1000 mg three times daily (alternative dosing is 2000 mg twice daily)			
15	Amikacin (Am)[2]	500 mg	750 mg	750 mg	1000 mg
16	Capreomycin (Am)[2]				
17	Kanamycin(Km)[2]	500 mg	750 mg	750 mg	1000 mg
18	Ethionamide (Eto)[4]	375 mg	500 mg	750 mg	1000 mg
19	Na-PAS (60% weight/vol)[3,4]	10 gm	14 gm	16 gm	22 gm
20	Amoxyclav (Amx/Clv) (In child: WHO 80mg/Kg in 2 divided doses)	875/125 mg BD	875/125 mg BD	875/125 mg (2 morning +1 evening)	875/125 (2 morning +1 evening)
21	Pyridoxine(Pdx)	50 mg	100 mg	100 mg	100 mg

[1]*For H mono/poly resistant TB;*

[2]*For adult more than 60 yrs of age, dose of SLI should be reduced to 10mg/kg (max up to 750 mg)*

[3]*In patient of PAS with 80% weight/volume the dose will be changed to 7.5gm (16-29Kg); 10 gm (30-45 Kg); 12 gm (46-70 Kg) and 16 gm (>70 Kg)*

[4]*Drugs can be given in divided doses in a day in the event of intolerance*

(b) Drug dosage of DR TB drugs for Paediatric patients:

DRUGS	Daily Dose (Pediatric till the age of 18 yrs)	Daily dose (Adult)
Isoniazid[1]	7–15 mg/kg for patients less than 30 kg; max dose 300 mg daily High dosage: 15-20 mg/kg	4–6 mg/kg once daily High –dose: 16–20 mg/ kg once daily
Rifampicin	10–20 mg/kg for patients less than 30 kg; max dose 600 mg daily	8–12 mg/kg once daily
Pyrazinamide	30–40 mg/kg for patients less than 30 kg; max dose 2000 mg daily	20–30 mg/kg once daily
Ethambutol	15-25 mg/kg once daily	12–18 mg/kg once daily
Levofloxacin	5 years and under: 15–20 mg/kg split into two doses (morning and evening) Over 5 years: 10–15 mg/kg once daily	10-15 mg/kg once daily
Moxifloxacin	7.5–10 mg/kg High dose: 10-15 mg/kg	400 mg once daily
Ethionamide/ Protionamide	15–20 mg/kg	15-20 mg/kg/day in 2 divided doses
Cycloserine	15–20 mg/kg	10-15mg/kg/ day in 2 divided doses
p-aminosalicylic acid	200–300 mg/kg for patients less than 30 kg in two divided doses	8- 12 g/day in 2 divided doses
Linezolid	<6 years age: 10-12 mg/kg/d; >6 years age: 15 mg/kg/d	600 mg once daily May be reduced to 300 mg once daily in CP
Clofazimine	2-5 mg/kg 50 mg capsule: Use thrice a week in children weighing upto 5 kg and every alternate day in children between 5-9 years age	200–300 mg daily (2 first months) then reduce to 100 mg daily (alternative dosing 100 mg daily)

Amoxicillin clavulanic acid	80 mg/kg (based on the amoxicillin component) in two divided doses	80 mg/ kg/ day in 2 divided doses
Kanamycin	15–20 mg/kg once daily (Max 1000mg)	15–20 mg kg once daily
Amikacin	15–20 mg/kg once daily (Max 1000mg)	15–20 mg kg once daily
Capreomycin	15–20 mg/kg once daily (Max 1000mg)	15–20 mg kg once daily
Imipenem cilastatin	Meropenem is preferred in children.	1000 imipenem/ 1000 mg cilastatin twice daily
Meropenem	20–40 mg/kg intravenous every eight hours. Meropenem is given with Amoxicillin-clavulanate* 40mg/kg given twice daily based on the amoxicillin component	1000 mg three times daily (alternative dosing is 2000 mg twice daily)
Bedaquiline	Dose not yet determined in children	400 mg once daily for 2 weeks then 200 mg 3 times per week for next 22 weeks
Delamanid	50 mg twice daily (100 mg) for 24 weeks in 6-11 years of age 100 mg twice daily (200 mg) for 24 weeks for 12-17 years of age.	100 mg twice daily (200 mg) for 24 weeks.

Children at risk for peripheral neuropathy (e.g. malnutrition or HIV co-infection) should also receive pyridoxine 5–10 mg/day

Programme division has taken the initiative to procure Paediatric formulation for MDR TB Paediatric patients. The drugs will be available in dispersible form/syrup/capsules/score tabs/tabs.

(c) Newer Anti TB Drugs: The newer drugs i.e. Bedaquiline and Delamanid are procured centrally and supplied to GMSDs/CMSS warehouses for further distribution:

- Bedaquiline: Each Bedaquiline bottle contains 188 Tabs having dosage strength of 100mg with 24 months of shelf life. This is sufficient for 6 months of duration as per NTEP treatment guidelines. BDQ is given to Patient at DR-TB centre to hand over to treatment supporter to be included in first monthly Type B box along with other drugs. Bottle to be remained under custody of treatment supervisor up to 24 weeks, while the Type B box will be issued on a monthly basis. DDS entered the BDQ stock in Stock Register and Nikshay-Aushadhi, on information from DRTB centre. District TB centre needs to ensure the availability of automatic ECG machine reader, if patient is started on BDQ.
- Delamanid – Delamanid is supplied in the form of Strips of 8 Tabs having dosage strength of 50mg with 60months of shelf life. As per NTEP guidelines, 672 Tabs of Delamanid will be issued for a patient for a period of 24 weeks @ 100mg BD daily dosage. DLM is issued to Nodal/ DRTB centre as loose drugs where patient is initiated on treatment. DLM is given on monthly basis in type B box till the end of IP along-with other drugs used in DRTB. Drugs are issued from SDS to DDS/ NDR-TB centres based on request through Nikshay-Aushadhi

1.2 Procurement of Anti TB Drugs, Diagnostics, Mobile Medical Vans and other consumables

1.2.1 At Centre Level: A Procurement and Supply Chain Management (PSM) Unit has been established at Central TB Division (CTD) of the Revised National Tuberculosis Control Programme (NTEP) for the Government of India for coordinating the Procurement and management of Supply Chain of all types of anti TB drugs, diagnostics and consumables. This

unit is headed and supervised by Addl. Deputy Director General (TB). The procurement is done centrally depending on the policies and funding mechanism either through the Procurement Agency of Government of India which is Central Medical Services Society (CMSS) or through the Global Drug Facility (GDF) of the Stop TB Partnership. The procurement is done based on Technical Specifications formulated by CTD and approved by a Technical committee of MoHFW. The annual/periodic requirements of the drugs and diagnostics are finalized at Central Level based on the inputs on the stock levels and consumption pattern of the States/TUs.

Currently all procurement of First line drugs under the domestic budget (DBS), the World Bank and funded by 'The Global Fund' (TGF or GFATM) are made through CMSS. However, the Second Line Drugs which are funded by The Global Fund are procured through the Global Drug Facility (GDF). Provision of emergency procurement of drugs is available under the programme in order to handle critical situation. These drugs and diagnostics are occasionally procured through GDF.

The First Line Drugs should be Pre-Qualified for the eligibility of procurement for any funding sources under any Procurement Agencies. However, the Second Line Drugs should be manufactured from a site which is WHO - GMP compliant when the Domestic/ World Bank funding is used. However, when the fund from The Global Fund is used, the Procurement of the Second Line Drugs are made only through GDF and the products are Pre-Qualified or from any countries under the Stringent Regulatory Authorities (SRA). The No Objection Certificate needs to be obtained by the Programme from the TGF when a product recommended by the Expert Review Panel (ERP) which may not fall under any one of the above categories.

In addition to Anti TB drugs, Binocular Microscopes, LED-Florescence Microscope, X-Ray machine with CR System, CBNAAT/Trunat Machines, Cartridges, LPA, Solid and Liquid Culture laboratory equipment & consumables, PDA/Tablet Computers, Mobile Medical Vans and services are also procured at Central level.

Programme division has procured Mobile Medical Vans fitted with CBNAAT Machines and other ancillary equipment for early diagnosis of MDR TB and TB in high risk population through Active Case Finding activity under NTEP. These vans are procured at centrally and distributed to all states for ACF.

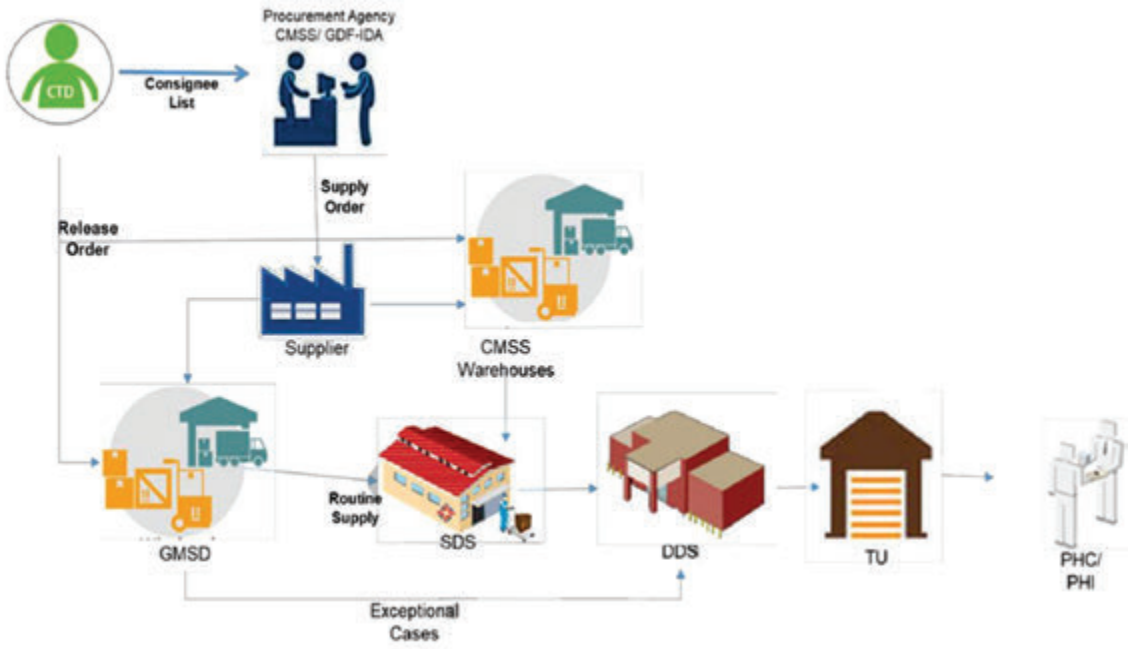
1.2.2 At State / District Level: In case of emergency only, few Anti TB drugs are procured locally at State / district level after approval from Central TB Division following NTEP guidelines. In addition to drugs, Laboratory consumables and equipment, computers, vehicles, printing material, IEC material in different language, PPD vials, refrigerator, Air conditioner, services etc. procured at state/district level following NTEP guidelines / General Financial Rules (GFR).

For procurement of TB drugs and consumable for diagnostics at state level, rate contracts may be established by the states for all drugs and diagnostics items under the NTEP, except for the CBNAAT/TRUENAT machines and cartridges/chips, to the extent of 25% of the annual requirements for such items, at the start of each financial year, using funds available under the NDCP Flexipool and/or through the funds available for the "Free diagnostics" and "Free drugs" initiatives respectively (refer DO letter T-18018/04/2018-Part (2) dated 23rd May 2019 from AS&MD(NHM), MoHFW, GoI).

1.3 Distribution:

1.3.1 First Line Drugs distribution: Distribution of drugs is to be carefully monitored, so as to

ensure uninterrupted availability of quality drugs. Requirements at drug stocking points are based on current utilization patterns and expected stocks at the time of delivery. Distribution of first line drug supplies is primarily supplied from the manufacturer to 21 Central Medical Store Society (CMSS) warehouses. However, in case of any emergent situation, drugs are supplied to six Government Medical Stores Depots (GMSDs) also at Karnal, Mumbai, Kolkata, Chennai, Guwahati and Hyderabad. Central TB Division issues drugs based upon consumption, closing stocks and stocking norms. The drugs are issued from the GMSDs/CMSS warehouses to the State Drug Stores (SDSs) for onward distribution to the districts. In case of any emergency, drugs are issued directly to the districts. GMSDs/CMSS take about 21 days to dispatch the drugs up to State Drug Store or districts. The SDS is operating in all the states in the head quarter catering to 50 million populations per SDS. In larger states/difficult terrine, more than 1 SDS has been established as per NTEP guidelines. The SDS/ Districts should follow up with the GMSDs/CMSS in case of delay in receipt of drugs after receipt of Release Order from Central TB Division. Drugs once received by the SDS are then transported to the districts. The districts then transfer the drugs to the TUs which in turn supply them to the PHIs. Drugs from SDS to DDS and sub-district level transported through a well-defined transportation mechanism/ Third-party Logistics (3PL).



Drug Distribution Cycle

1.3.2 Second Line Drugs distribution: Distribution system of second line drug supplies is same as first line anti TB drugs. However, under DBS, drugs primarily supplied from the manufacturer to CMSS warehouses and under TGF grant, drugs are supplied to GMSDs. The Rest of drugs distribution from SDS to DTC, DTC to TU and from TU to PHIs is same as depicted above for 1st line drugs.

1.3.3 Flow of Drugs: The flow of drugs is the direct reverse of the flow of reports. Drug requirements, consumption and stock positions at district and State levels are monitored at the State/Central TB Division through the Nikshay-Aushadhi software. Regular, accurate information of consumption, drug stock and supplies at PHI, TUs, Districts & State levels are essential for correct monitoring of the stock position at all levels.

Supply of drugs by Central TB Division from the GMSD to the SDS is communicated to the State through a Release Order. Based on the state stock availability and consumption, stock is supplied from SDS to the district drug store to its TUs and then to the PHIs.

Hence, at the beginning, the PHIs are supplied with a stock of two months (ie. stock for utilization in the first month along with a reserve stock equal to the consumption for one month). Then every month, as per the monthly PHI request/report through Nikshay-Aushadhi, they are supplied with stock from the TU which helps to maintain the reserve stock for a month utilization at the PHI. This reserve stock helps the PHI to provide drugs if more patients are put on treatment in a particular month and to provide cover for delay in supplies from TU. Thus, no patient is sent back due to lack of drugs even on a single occasion.

For the TU level to ensure that the PHIs have a month's utilization stock plus a reserve stock of one-month consumption, it needs to have a reserve stock of two months at the beginning of the quarter. This will ensure a continuous supply of drugs.

The district drug store should have at least a reserve stock of 3 months at the beginning of the quarter. Similarly, the state drug stores should have at least a reserve stock of 3 months for utilization of the state.

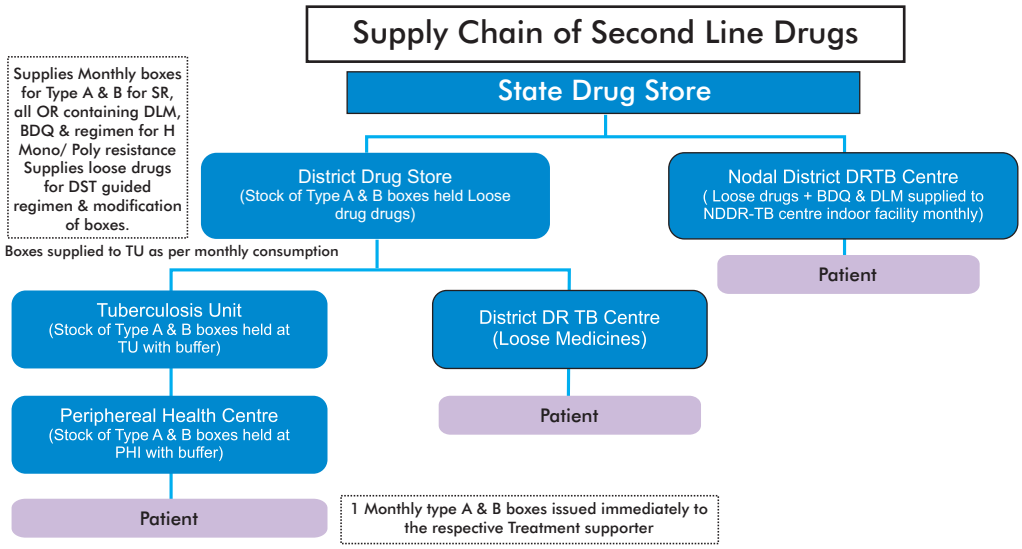
The regular process of supply of fresh stock of drugs from the GMSD/CMSS to the state/SDS begins only when the states submit their requirement/report to the CTD through Nikshay-Aushadhi. Once the drug requests are received by Central TB Division, it takes around 7-10 days for CTD to process the requirement. The state should have at least a utilization stock of 10 months at the beginning of the quarter.

During the first week of each quarter, TU/district and state will have to submit their requirement through Nikshay-Aushadhi. In case of any disruption, the requirement can be submitted in the hard copy also in the prescribed NTEP format. Later, it can be submitted/uploaded through Nikshay-Aushadhi to avoid interruption in supply of medicines.

1.3.4 Movement of Drugs:

GMSDs/ CMSS	Quarterly (Drugs are issued to SDSs on basis of Release order from Central TB division based on the states/districts request/report)
SDS	Quarterly (Drugs are issued to the DDSs/NDRTBC based on requirement. At the same time drugs are received from GMSDs)
DDS	Quarterly (Drugs are issued to the TU drug store/DDRTBC based on requirement. At the same time DDS receives drugs from SDS)
TUS	Monthly (Drugs are issued to the PHIs based on requirement. At the same time TU receives drugs from DDS)
PHIs	Drugs are received at PHIs from concerned TUs and issued for the treatment of TB Patients

1.3.5 Supply Chain Management of 2nd Line Anti TB Drugs



1.3.6 Stocking norms for 1st and 2nd Line Drugs

Thus, the quantity of reserve stocks and total stocks at each level at the start of the quarter (considering the receipt from one higher level) should be as follows:

PHI	1 month	1 month	2 months
TU	-	2 months	4 months
District	-	3 months	7 months
State	-	3 months	10 months

It is expected that buffer stocks shall also be ensured at each level as per the above stocking norms, given in the table below:

	Stock for utilization	Reserve stock	
PHI	1month	1month	(Monthly consumption x 2) – (existing stock in PHI at end of the month)
TU drug store	0month	2months	(Quarterly consumption / 3) x 4 – (existing stock in TU including PHI drug stores at end of the quarter)
DTC Drug store	0month	3months	(Quarterly consumption / 3) x 7 – (existing stock in DTC drug store including TU & PHI drug stores at end of the quarter)
SDS	0month	3months	(Quarterly consumption / 3) x 10- (existing stock in SDS including stocks at all districts at end of the quarter)

1.4 Storage:

1.4.1 State Drug Store (SDS): Over the past few years, the responsibility of drug logistics management has been commendably taken up by the States which can be seen in the fact that more than 45 State Drug Stores (SDS') have been established in various States/UTs in the country. SDSs are essential for decentralizing drug management at State level and in sharply reducing lead-times for fulfilling drug requests (norm – 1 SDS for 50 million population). In larger states/difficult terrine, more than 1 SDS can be established as per NTEP guidelines.

An official should be nominated as Nodal Person responsible for Procurement and Supply Chain Management activities at state level/SDS. A qualified Pharmacist cum Storekeeper and Store Assistant (additional post if >1800 monthly boxes preparation per month) is required for management of drugs and other consumables at SDS.

1.4.2 District Drug Store (DDS): District Drug Store (DDS) should be established as per NTEP guidelines with proper infrastructure and temperature control facilities for storage of anti TB drugs and consumables. Sufficient space is required at DDS to accommodate the requirement of all concerned TUs/PHIs as per NTEP stocking norms. A qualified Pharmacist under the supervision of District TB officer is required for management of drugs and other consumables at DDS.

The pharmacist/store assistant should be trained in NTEP drug management and Nikshay-Aushadhi and has to undergo regular refresher training as and when the revised NTEP drug management is conducted.

1.4.3 TU/PHI store – Anti TB drugs are stored at Tuberculosis Unit (TU) and PHI store also as per the NTEP guidelines/ stocking norms.

1.4.4 Stacking of Anti TB Drugs: The STO/DTO must ensure that the Storekeeper performs the following activities with respect to the storage/ stacking of Anti-TB Drugs and consumables:

- Ensure that different drug/consumables items are clearly segregated and stacked on separate racks.
- Different batches of drugs with different dates of manufacture and expiry are stored separately so as to facilitate First Expiry First Out (FEFO) principles viz. drug batches with the most recent expiry are issued first.
- Mark 'Expiry Dates' in Bold Letters 3" to 4" in size, on the drug cartons with a Marker Pen, for easy identification and control of drugs immediately on their arrival.

1.4.5 Guidelines for proper storage of Anti TB Drugs: Importance of good storage conditions and safe custody of drugs in addition to good supply chain management is also stressed upon the States. The STO/ DTO must ensure that the pharmacist/store-keeper adheres to the following guidelines on proper storage of drugs:

- Clean and disinfect storeroom regularly
- Store supplies in a dry, well-lit, and well-ventilated storeroom, out of direct sunlight.
- Secure the storeroom from water penetration.
- Ensure that fire safety equipment is available & accessible and personnel are trained to use it. These should also be covered under AMC.
- Drug cartons should not be stacked on the floor, away from the walls and not all one over the other.

- Store medical supplies separately, away from rodents, insecticides, chemicals, old files, office supplies, and other materials.
- The identification label, expiry date & manufacturing date of the Anti TB drugs, CBNAAT Cartridges and Truenat chips etc. should be marked with a bold marker pen on the visible side of the carton.
- Store supplies in a manner accessible for First-Expiry-First-Out (FEFO), counting, and general management.
- Separate and dispose off damaged or expired products without delay as soon as approval of the same has been received.
- The disposal of expired drugs needs to be done as per Bio-medical waste management guidelines.

1.5 Usage

The monthly blister strips/ boxes should be provided to the patients through the DOT Providers only from the PHIs. Besides timely availability of drugs to the patients after diagnosis, thorough dispensing instructions should also be provided to the patient.

1.6 Recording, Reporting and Monitoring

1.6.1 Recording –

Stock Register: Stock Register is maintained at the SDS, districts & TU level drug stores in the prescribed format as given overleaf. A Stock Register is maintained to record receipt, issue and balance stock of drugs. The status of stock along with their expiry details can be ascertained at any point of time through this register. All receipts should be entered neatly in RED colour including transfers from other districts. The issue of drugs should be entered in BLUE colour including all transfer outs to other districts/SDS.

Example:

There are four batches of DSTB-IP drug in the DTC with expiry dates as Jan-21, May-21, Sept-21 and Dec-21. Column 'l' should contain balance quantity of drugs with expiry date as Jan-21, Column 'm' with expiry date as May-21, Column 'n' with expiry date as Sept-21 and Column 'o' with expiry date as Dec-21.

As and when, the entire quantity of the drug with a particular expiry date stands completely issued, the balance in that particular column (l to o) shall become "Nil" or "Zero" on the date on which the last issue is made. As and when, the drugs with a new Expiry Date are received; the new Expiry Date is mentioned at the top of the column.

Before making any issue of drugs, the storekeeper should always look at columns (l) to (o) and check as to which drugs are due to expire first. The drugs, which are due to expire first, are to be issued first so that all the drugs issued will follow the FEFO principles

Carry Forward of Balances: While carrying forward the balances with different expiry dates from a filled-up page on to a new page of the Stock Register, it should be ensured that the columns (l) to (o) should record the Expiry Dates in an ascending order, i.e. the balance of drugs with an earliest expiry date should be recorded in column (l), whereas balance of drugs with a later expiry date should be recorded in column (m) and so on.

As seen in the above example, the Stock Register facilitates issue of drugs as per FEFO principles. However, while the Store keeper shall strictly follow FEFO principles, it is also expected of him to ensure that all short-expiry drugs do not get issued to one district/sub-district. Instead, distribution shall be based on the utilization pattern of each district/sub-district.

An Exercise on Stock Register along with the format is available overleaf. Solution to the Exercise is available at Annexure-3

Exercise on Stock Register:

The following transactions occurred during the month of April 2018.

Opening Balance of DSTB-IP (A) as on 1.04.2018: 1000 strips of 28 Tabs (from the batch no XY received from SDS Agra; Date of Expiry – Aug-2020).

Receipts of Drug: DSTB-IP (A)

Batch No.	Date of Receipt	Date of Mfg.	Date of Expiry	Qty Received (Nos.)	Name of Party (Supplier)	Invoice No./ Receipt Voucher No.	Date of Invoice/ Voucher No.
AB	10.04.2018	Nov-17	Oct-20	6000	GMSD Karnal	IV 35	10.04.2018
CD	15.04.2018	Dec-17	Nov-20	5000	GMSD Mumbai	IV 14	8.04.2018
EF	25.04.2018	Jan-18	Dec-20	1000	SDS Delhi	DTA 68	12.04.2018

Issues of Drug: DSTB-IP (A)

Date of Issue	Quantity Issued (Nos.)	Sent / Issued to	Issue Voucher No.	Date of Issue Voucher
17.04.2018	3000	DTC – Agra	SIV No. 1	17.04.2018
26.04.2018	4000	DTC – Mathura	SIV No. 2	26.04.2018
29.04.2018	4000	DTC - Firozabad	SIV No. 3	29.04.2018

Please record the above transactions in the Stock Register format provided on the page overleaf.

Stock Register (SR)

Drug Item: DSTB-IP(A) **Unit of Measurement (UOM): Strip of 28 Tabs** **Folio No.:**

SL. NO.	Particulars of receipts & issues							Receipt (qty.)	Issue (qty.)	Balance (qty.)	Date-wise expiry details of balance (qty.)				Signature of store-keeper	Remarks
	Date (Dd/ mm/ yy) of Transaction (Receipt/ Issue)	Name of Party (GMSD/ SDS/ DTC/TU)	Receipt Voucher No. (For Receipts only)	Issue Voucher No.(For Issues only)	Date of Issue/ Receipt Voucher	Batch No.	Date of Expiry				Expiry Date (Aug-20)	Expiry Date (Oct-20)	Expiry Date (.....)	Expiry Date (.....)		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1	1.04.2018	**Op Balance**	-	-	-	XY	Aug-20	0	0	1000	1000	0	0	0		
2	10.04.2018	GMSD Karnal	IV-35		1.04.2018	AB	Oct-20	6000	0	7000	1000	6000	0	0		
3																
4																
5																
6																
7																
8																
9																
10																

1.6.2 Reporting: The regular process of supply of new stock of drugs to the districts / SDS begins only when the districts submit their requirement. For effective reporting, the programme has implemented a web-based real time Logistics Management Information System(LMIS) software i.e. Nikshay-Aushadhi. This software is used at all levels for reporting of drugs availability, consumption and future requirement. The request of the stocking units is to be submitted as per the scheduled mentioned below:

Drug Request of Stocking y/Monthly Drug Request	
PHI to TU	1st week of each subsequent month
TU to DTC	1st week of the month after subsequent quarter
DTC to SDS / STO	1st week of the month after subsequent quarter
SDS to CTD	By 10th of the month after subsequent quarter

All PHIs submit Monthly Request for drugs and consumables through Nikshay-Aushadhi to the concerned TUs. All TUs/DTCs/SDSs also submit their quarterly requirement through Nikshay-Aushadhi as per NTEP guidelines.

The district requests are validated by the State TB Cell based on which drugs are issued by the SDS before end of the first month after the quarter. Respective states are also expected to make arrangements for transportation of drugs from SDS to District Tuberculosis Centres (DTCs) and onwards.

The state requests are analysed by CTD based on which drugs are issued to SDSs through their respective GMSDs/ CMSS warehouses.

It is very important to make sure that every health facility in the district gets adequate supply of anti-tuberculosis drugs. Timely initiation of treatment is not possible if the supply of drugs is inadequate. The basis for stocking adequate amount of drugs at various levels is described in the stocking norms table.

1.6.3 Monitoring: Monitoring supply chain of drugs & other items is important to ensure:

- Uninterrupted supply of drugs, consumables etc.
- Prevention of overstocking to avoid wastage of unusual resources leading to expiry of high value drugs.
- Prevention of stock-outs to avoid delay in treatment initiation.

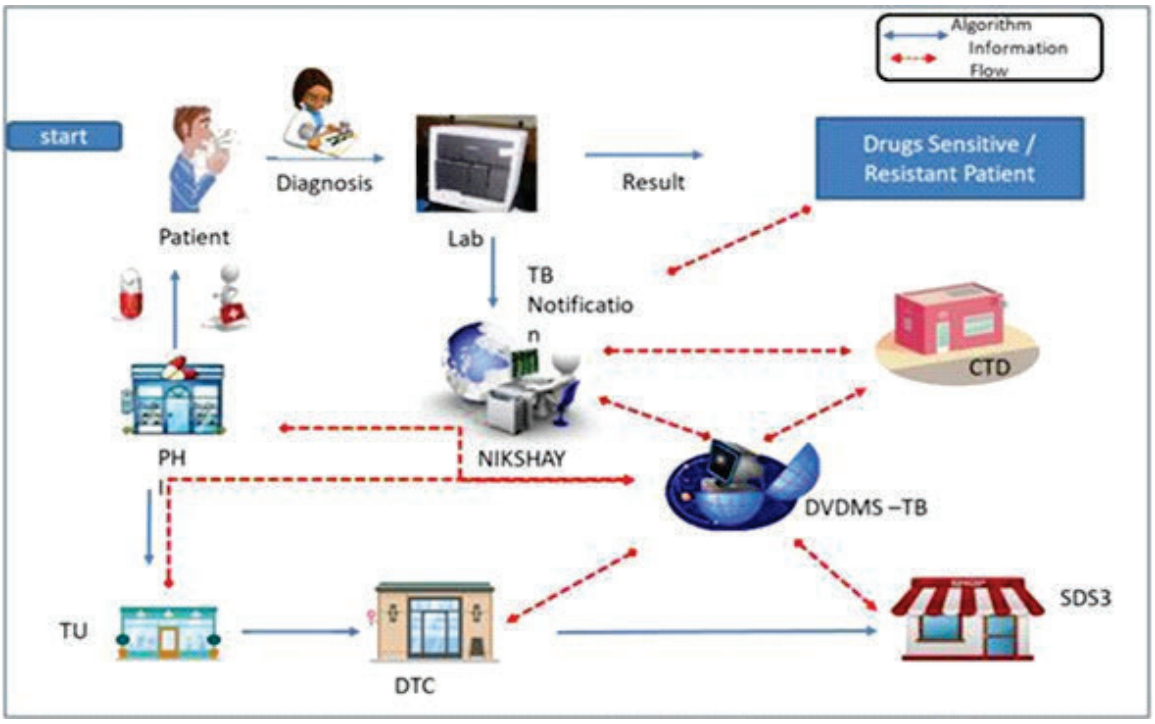
Monitoring drugs and logistics is done through a two-tier monitoring system:

Two–tier monitoring	**Central system**- at central level, Central TB Division (CTD) reviews and ensures adequacy of drugs and consumables at State level.
system under RNTCP	**Decentralized system**- by the State TB Officers (STOs) and the District TB Officers (DTOs) whereas they ensure adequacy of drugs and consumables up to the level of the DOT Centers.

Nikshay-Aushadhi- It ensure the real-time monitoring of drugs and consumables availability, usage, requirement along-with expiry management.

CTD ensures drug adequacy at states/districts by reviewing stock availability through Nikshay-Aushadhi which enables continuous monitoring of drug stock position at all levels.

(a) Monitoring through Nikshay-Aushadhi



(b) Physical Verification of drug stocks in the stores: - Ensure that the quantity of drugs in the Stock Register/Nikshay-Aushadhi matches with the physical stock balance in the drug store. For this purpose, physical verification should be carried out under the supervision of officer-in-charge at the State, DTC, TU & PHI drug stores regularly at the end of each month. Any shortage or excesses should be substantiated by submission of a separate report and to be rectified in Nikshay-Aushadhi after approval from competent authority. The Physical Verification Register/Sheet should be verified by officer-in-charge and maintained at drug store.

(C) Criteria for identification of short expiry Boxes / strips: There may be instances when the stores may have some short-expiry drugs. It is important that proactive measures be taken to ensure transfer of such drugs to other districts/states to prevent expiry of such batch of drugs. The DTO shall inform the State requesting for an approval for transfer to other districts.

Note: The loose drugs can be used till the last date of expiry i.e. Drugs with DOE of Dec-2020 can be used till 31st Dec-2020.

(d) Additional Drug Request (ADR): The need for an Additional Drug Request arises only if the more patients put on treatment in the previous month in a quarter goes up, resulting in an insufficient stock in the store. To get the additional supply from CTD/SDS/DDS/TU, an Additional drug request for each item needs to be submitted by the SDS In-charge/DTO/MOTC. Before sending the ADR, should consider and track the drugs that have been already released and are being transported from central/state/district/TU stores.

(e) HIV positive TB patients who are on second line ART: Information on the need for Cap Rifabutin (150mg) for HIV positive TB patients who are on second line ART or ART containing Protease Inhibitors should be provided by the in-charge of ART Center providing second line ART (Centres of Excellence) to the DTO.

The District TB Officer needs to supply the loose drugs to the concerned ART Center on a case to case basis. The DTO would ensure that loose anti TB drugs are given to the 2nd Line ART patient along with Cap Rifabutin instead of Rifampicin. MO-PHI should sensitize the DOT provider regarding the changes made and monitor the same.

Reconstitution: Partially used boxes/strips/bottles in case of lost to follow up, failure or death of a patient are sent to district tuberculosis centre and are reconstituted. Partially used drug box/strip is at the risk of expiry if they are not reconstituted. This should be performed at the DTC/SDS and carried out under the direct supervision of the DTO/MO/office-in-charge. Complete information about LTFU, death and transfer out cases, including TB number, name of PHI and number of blisters remaining unused in the boxes/strips/bottle should be made available and entered in 'Nikshay Aushadhi'.

There may be instances where drugs for reconstitution may not be sufficient and run at the risk of expiry. In such cases they may be used as loose drugs to avoid expiry in case of Second line drugs except new drugs where specific instructions given to be followed.

Expiry Management: If any drug expires due to reasons beyond control, the write-off of expired drugs should be as per the guidelines given in NTEP National Strategic Plan. As per NSP, the State is allowed to write off up to 2% of cost of annual supply of drugs on implementation of DST guided treatment and 2% cost of rapid molecular test cartridges. The expired stock should be disposed-off as per the Bio-medical Waste (Management and Handling) guidelines of Govt. of India.

1.7 Quality Assurance of drugs

Maintaining quality of drugs remains a critical programme requirement. This is enabled through a system of pre-dispatch & post-dispatch testing of drugs and monitoring of the quality throughout their shelf-life up to consumption by the patients. The following steps have been taken by the Programme in ensuring best quality drugs:

- At the time of Procurement: Stringent Quality Assurance requirements (WHO-GMP certification) have been laid down under NTEP. First line Drugs are procured from WHO Pre-qualified source & second line drugs from WHO-GMP compliant suppliers under DBS/WB procurement. However, in case of The Global Fund funding, 2nd line drugs are procured form WHO-PQ source only. A Pre-dispatch inspection of all batches is undertaken prior to their dispatch from the factory premises.
- Post-Procurement: Samples are lifted from various sites as per protocol developed by the programme. These samples are picked up randomly from the GMSDs, SDS' District & TU level each quarter and tested by an Independent Quality Assurance Lab engaged by NTEP. Additionally, quality is also monitored by State & Central Drug Inspectors independently.

2. Supply Chain Management of other items

I. Treatment-related supplies - such as syringes, needles, water for injections, water containers, disposable tumblers etc.

II. Diagnostics- CBNAAT Machines & Cartridges, Truenat machines & Chips, Binocular microscopes (BM) & LED-Fluorescence Microscopes, X-Ray Machines with supportive accessories, Lab consumables (sputum containers and slides)

III. Printing & Stationary – IEC material, Forms, registers, reports and Envelops for 99 DOTS

2.1 Treatment-related supplies: Sufficient no. of water containers and disposable tumblers be made available at the DOT centres for providing DOT. It is very important for every health facility that administers treatment under NTEP to have an adequate supply of sterile water, disposable needles and syringes for giving injections. The requirements of these items should be matched with those of Injection vials. Ensure that there is a sufficient supply of cotton and methylated spirit so that injections are always given under sterile conditions.

2.2 Diagnostics –

2.2.1 CBNAAT/Truenat Machines and Cartridges/Chips: These are procured at centrally and supplied to state/district/sites based on their requirement. Cartridges/Chips are supplied based on the stock availability, consumption and expected cases load. Recording, reporting and monitoring of cartridges/chips is done through Nikshay-Aushadhi.

2.2.2 Binocular Microscopes (BMs) & LED Fluorescence Microscopes (FM): Sputum Microscopy is an essential part of NTEP. It plays a major role in the programme and hence procurement of LED-FM and BMs is an important component in NTEP and the procurement of both items is undertaken by CTD and are delivered to the States / Districts. All LED-FM/BMs should be covered by annual maintenance contracts by states/districts, at the end of their warranty periods.

(a) Binocular Microscopes (Bms): As per NTEP guidelines, 1 BM is required for every designated microscopy centre (DMC). One DMC exists for every 1 lakh population (0.5 lakh population in hilly, tribal and difficult areas). In addition, NTEP may also supply BMs to DMCs established in other sectors like ESIS, Public Sector Undertakings, Medical College etc., if required. BMs are also supplied by NTEP to districts (depending on the number of DMCs/TUs) for implementation of EQA.

(b) LED Fluorescence Microscopes (FM): LED FMs are supplied to the high case load facilities where the workload is more than 25 slides per day.

2.2.3 Laboratory consumables:

2.2.3.1 Sputum containers and slides: To keep health facility and microscopy laboratories supplied with sputum containers and slides, calculate the number of sputum containers needed for diagnosis and follow-up examinations in each quarter. Then determine the number of slides needed. Place an order for the sputum containers and slides with the appropriate source. Visit each health facility that collects sputum specimens and microscopy laboratories to make sure there is an adequate stock of sputum containers and slides.

2.2.3.2 Calculation of requirement of sputum containers: During the first week of each quarter, calculate the quantity of sputum containers your district will need for that quarter. The following steps are required for this calculation:

- Determine the number of new smear-positive cases registered and treated during the last quarter. Use the detail of number of TB patients put on treatment both new and previously treated cases through Nikshay for this.

- Determine the quantity of sputum containers needed for diagnosis as described below:

– Multiply the number of new pulmonary smear-positive cases by 10. The number of smear-negative, extra-pulmonary, and previously treated smear-positive cases should not be considered, because 10 symptomatic cases include all types of patients and because patients with failure and default are examined as follow-up. Ten is the average number of symptomatic required to be examined for detecting one case of New pulmonary smear-positive tuberculosis (including a smear negative X-ray positive case).

– Multiply the number obtained in Step 2a by 2. (2 sputum specimens are taken for each symptomatic patient.)

- Determine the number of sputum containers needed for follow-up examinations. Follow-up specimens are taken for the majority of smear-positive patients on 2 separate occasions during their treatment (at the end of the intensive phase and at the end of treatment). One sputum container is needed for each follow-up examination because 1 sputum specimen is taken for each follow-up sputum examination.

  For each pulmonary smear-negative case, follow-up sputum is taken twice. Hence, multiply the number of pulmonary smear-negative patients by 2 (1 sputum sample each at the end of the intensive phase and at the end of treatment)

  Add the number of sputum containers needed for diagnosis to those needed for follow-up examinations. After you determine the number of sputum containers needed for diagnosis and follow-up examinations, add these numbers to obtain the approximate number of sputum containers required for the quarter.
- Allowance for reserve stock: Allow sufficient reserve stock for 3 months.
- Account for wastage: Add 10% to account for wastage of sputum containers.
- Account for the sputum containers in stock.

On the last working day of the quarter, count the number of sputum containers presently in stock. Then, during the first week of the new quarter, subtract the number of sputum containers in stock from that needed for diagnosis and follow-up examinations as calculated (Step 4).

2.2.3.3 Calculation of requirement of slides: There should be approximately the same number of slides in stock as sputum containers, because one slide is used to examine one specimen in a sputum container. Therefore, once you have determined the number of sputum containers needed for the next quarter, order the same number of slides. There may be a need for slightly more number of slides than containers because of unavoidable breakage of slides.

2.2.3.4 Order for sputum containers and slides: After you have calculated the number of sputum containers and slides needed for your district, order the supplies. Order the sputum containers during the first week of the quarter so that the health units and microscopy laboratories have enough sputum containers to collect sputum specimens and the DMCs have enough slides to conduct sputum smear examinations. In the NTEP, these supplies will be procured by the State/District It is important that good quality slides, containers and reagents are purchased.

2.2.3.5 Distribution of sputum containers and slides: After you receive the supply of sputum containers and slides for the quarter, distribute the sputum containers to all peripheral health institutions in the district. The supply of sputum containers to those PHIs that are not functioning as sputum collection centres or DMCs would facilitate follow-up examinations

because patients can be provided with the same for morning samples. Reserve stocks should be maintained at all levels.

2.2.3.6 Ensuring adequate supply of sputum containers and slides: When you visit the PHIs, check the supply areas for an adequate stock of sputum containers and slides. Ask the health workers or laboratory technicians if they think the stock is sufficient. Estimate if there is enough stock to last until the end of the quarter, and if there is sufficient reserve stock.

2.2.3.7 50-ml polypropylene conical tubes: Determine the quantity of Polypropylene tubes needed for diagnosis as described below:

Multiply the number of new pulmonary smear-positive cases by 10. Additional 25% of smear-negative, extra-pulmonary, previously treated smear-positive cases, UDST, follow-up cases and key population should be considered.

Multiply the number obtained in Step above by 2. (2 sputum specimens are taken for each symptomatic patient.)

EXERCISE

In this exercise you will calculate the number of sputum containers and slides needed by a district for the current quarter.

According to the Quarterly Report on New and Retreatment Cases, Thane District began treatment of 80 New pulmonary smear-positive cases, 20 retreatment (smear-positive) cases and 60 pulmonary smear-negative cases last quarter. There were 125 sputum containers and slides currently in stock in the beginning of the quarter.

Calculate the number of sputum containers and slides needed for the quarter.

Answer the following questions:

1. How many sputum containers should you order for Thane District?
2. How many slides should you order for the district?

2.3 Stationery & Printing

2.3.1 IEC Material

2.3.1 Forms, registers and reports: As you have learned throughout this course, there are several tuberculosis forms, registers and reports used in the district.

Forms, registers & Reports		Person responsible for maintenance of records/forms/reports
Forms		
1.	Referral Slip	ASHA, AWW, Link Workers etc.
2.	NTEP request form for examination of biological specimen	Medical Officer
3.	Specimen Examination	Medical Officer
4.	Tuberculosis Treatment Card	Treatment Supporter
5.	DR-TB Treatment Card	Treatment Supporter
6.	Patient's TB Identity Card	Health Care Provider
7.	DR-TB patient identity card	Health Care Provider
8.	Referral form for treatment	Medical Officer
9.	Referral form for treatment of DR-TB	Medical Officer
10.	Transfer Form	Medical Officer/ District TB Officer
11.	TB Notification Forms for	Private Practitioner
12.	Laboratories, Private Clinics/Hospitals and Chemists	Senior TB Treatment Supervisor
13.	Public Health Action form (may be converted in to register)	
Registers		
14.	Tuberculosis Laboratory Register	Lab Technician, STLS
15.	Culture and DST Laboratory Register	C&DST LT
16.	Tuberculosis Notification Register	MOPHI / Senior Treatment Supervisor
17.	PMDT treatment register	DRTB Medical officer
18.	Stock Register	Pharmacist / Storekeeper
Reports		
19.	Programme Management Report	Supervisor
20.	Supervisory checklists	Supervisor
21.	Monthly tour reports and advance tour programs	Supervisor
22.	Statement of Expenditure, audit reports, utilization certificates	STO/DTO/Accountant
23.	Physical verification report	Verifying Officer
24.	Internal Evaluation report	IE team

Determine once a year the number of all forms, registers and reports your State/district will need during the following year. Make sure there is an adequate supply of all forms, registers and reports within your State/district and sufficient funds are available for the same as per norms.

2.3.2. The number of forms, registers and reports required is calculated as below: During the first week of each year, calculate the number of forms, registers and reports your State/district will require for that year. There are three steps for this calculation:

Determination of the number of forms, registers and reports your State/district will need for the year.

The number of Tuberculosis Treatment Cards needed depends on the number of patients treated for tuberculosis in the previous year. Use the four Quarterly Reports on New and Retreatment Cases for the previous year to determine the number of patients treated for tuberculosis. Multiply by 2 to allow for a duplicate card to be kept by the Treatment Supporter.

Approximately one Tuberculosis Notification Register is needed each year for each PHI. Approximately one Tuberculosis Laboratory Register is needed for each microscopy centre in the district each year. If some pages of these registers remain blank at the end of a year, it can be used the following year. However, begin from a new page every year.

Approximately 10 copies of the Laboratory Form for Sputum Examination are needed for each pulmonary smear-positive tuberculosis case treated.

For diagnosis, approximately 10 Laboratory Forms for Sputum Examination are needed. (10 is the average number of symptomatics for each case of pulmonary smear-positive tuberculosis identified.)

For follow-up, approximately 0.2 Laboratory Forms (1 out of 10 examined will be smear positive, each need two forms for follow up. When calculated, out of 10 in will be 0.2. Hence, need not be calculated) for Sputum Examination are needed for each pulmonary tuberculosis case.

If you have access to a reference laboratory, a patient's sputum specimen can be sent for culture examination and if required, also to determine whether a patient is sensitive or resistant to an anti-tuberculosis drug. The Mycobacteriology Culture/Sensitivity Test Form contains a patient's culture and sensitivity results. Medical officers should send these through DTOs to C & S Laboratory with copy of the treatment card. Three forms should be filled up for each referral.

Four copies of the Quarterly Reports are used each quarter. Keep one copy for the district, send one copy to the STO, one copy to STDC and send one copy to the Central TB Division. Since there are 4 quarters and 4 copies are used during each quarter, 16 copies of this report are needed each year.

Preferably, all these reports should be stored in electronic format at district and state levels. These should be sent to all concerned levels through e-mail. You may avoid excess and wasteful use of paper. However, it should be noted that districts and states should have facilities for back-up of data in electronic format (CD-formats, etc) to avoid data loss due to virus attack and sabotage. The back-up materials should be kept under safe custody.

Tuberculosis Transfer Form is completed when a patient is transferred to a health facility in another district/sub-district. Once a patient reports to a new district and is registered, the bottom portion of this form is mailed back (or sent by other means) to the referring health facility. When the referring health facility receives this portion of the form, they will know that the patient's treatment is being continued.

The number of Transfer Forms needed depends on the number of patients who were transferred to another district last year. Add the total numbers in the transferred to another district column for the four Quarterly Reports on the Results of Treatment for the previous year to determine the number of patients who were transferred to another district that year.

Three copies of the Tuberculosis Transfer Form are needed for every patient who is to be transferred to another district next year. One copy each is given to:

- The patient to be transferred, to hand over to the PHI where the reports for continuation of treatment
- The TB unit to which the patient is transferred
- Office copy, to be retained at the transferring unit

Therefore, if 10 patients were transferred to another district last year, 30 Tuberculosis Transfer Forms (10 patients x 3 copies per patient) would be needed for the following year.

The Annexures I and II list the laboratory materials, tuberculosis forms and registers a district needs for one year.

Add an extra 20% of the number of forms needed to take care of the increase in tuberculosis cases or lost forms: To account for the increase in tuberculosis cases and lost forms, add an extra 20% of the number of forms needed. You do not have to make this calculation for the Tuberculosis Laboratory Register, because one register should be sufficient for one year.

The Tuberculosis Laboratory Register allows for registration of at least 2000 patients. For each lakh, 75 smear-positive patients are projected, requiring the examination of 750 patients (thrice each). Additional follow-up examinations will bring the number of registers needed to approximately one lab register / lakh.

Account for the forms, registers and reports in stock: On the last working day of the year, count the number of forms you have in stock. Then, during the first week of the new quarter, subtract the number of each form in stock from the total number of each form needed. This gives the total number of forms, registers and reports required to be indented.

Distribution of forms, registers and reports: After you receive the supply of tuberculosis forms and registers for the year, distribute the appropriate forms to the health units and the Tuberculosis Laboratory Register to the microscopy centre. Keep the excess supply which is not distributed to the facilities in the State/district to meet subsequent requirements of the health units during the year.

2.3.3. Printed materials: The districts should maintain an adequate supply of the printed materials of latest programmatic guidelines. Some of them are mentioned below, but it is not restricted to this list only:

- Technical and Operational Guidelines
- National Guidelines on Programmatic Management of Drug Resistant TB
- National Guidelines on Partnerships
- Desk Reference (Charts on Diagnostic Algorithm, Dosage of anti-TB drugs, any other)
- Laboratory Manual for Sputum Smear Microscopy and NTEP Laboratory Network guidelines for Quality Assurance of smear microscopy for diagnosing TB
- Guidance document on Nutrition Support to TB patients
- HIV-TB Collaborative Framework
- TB – Diabetes Collaborative Framework
- TB – Tobacco Collaborative Framework
- Other relevant document/guidelines/Circulars as and where circulated out by CTD

*These guidelines need not be printed. For reference, please refer to NTEP website.

2.3.4 Envelops for 99-DOTS: The NTEP has been using 99 DOTS – an IT enabled 'pill-in-hand' adherence monitoring system for all DSTB patients on daily regimen. This system requires envelops which wrap around the medicine. The envelops have printed unique phone numbers which the patient can see when taking medication and use to give free calls to report their medication. These envelops are printed at state level and distributed to districts. The cost of printing and distribution of these envelops to be budged in state PIP. Specification for printing of envelop provided by CTD to all states.

All printed materials may be printed at state-levels to ensure quality

EXERCISE 1

From the information provided about the Birbhum District, list the types and number of tuberculosis forms you need to order for this district to last throughout the next year.

Case: Birbhum District

In 2018, in Bolpur TU of Birbhum District, there were 220 tuberculosis patients, of whom 100 were diagnosed as new pulmonary smear-positive cases. There are 5 microscopy centres and 15 PHIs in the sub-district. In this year, 8 patients from the sub-district were transferred to another sub-district. Approximately 10 culture/sensitivity examinations were done in the same year. At this time, you need to order tuberculosis forms and registers for 2019. The following number of tuberculosis forms and registers are available in the reserve stock:

50 - Tuberculosis Treatment cards	10 - Transfer Forms
35 - Tuberculosis Identity Cards	6 - Tuberculosis Laboratory Registers
82 - NTEP request form for examination of biological specimen for TB	3 - Tuberculosis notification Registers
15 - Mycobacteriology Culture/Sensitivity Test Forms	

Tuberculosis	Number	Add 20%	Subtract	Net number
Form/Register	required		Stock	

EXERCISE 2

1. What should be the reserve stock of drugs at the district level?
2. In Katurma District, 40 smear-positive cases were registered during the third quarter of year 2000. Calculate the total number of sputum containers needed for diagnosis.
3. What is the basis for calculation of drug stocks?
4. What is the purpose of maintaining reserve stock?

3. Preventive maintenance of vehicles & other office equipment etc.

3.1. Vehicles: Vehicles are provided as per the financial guidelines of NTEP. It should be ensured that the vehicles purchased by NTEP (4 wheelers and 2 wheelers) are in working condition. This requires comprehensive annual insurance and regular & periodic maintenance preferably through authorized workshops. Funds for the same should be made available as per norms given in financial guidelines of NTEP. Accessories like helmets, rain coats, side boxes etc. should be provided along with two wheelers for STSs/STLSs. Log books should be maintained for the vehicles.

3.2. Office equipments and equipments for IRLs: All Office equipments and equipments for IRLs provided at State/District levels by NTEP need to be maintained through Annual Maintenance Contract (AMC), utilizing funds available under the Programme. The details given in NTEP Financial Norms which should be adhered to.

3.3. PDA/PC-Tablets: PC-Tablets are procured centrally and distributed to all the states. These Tablets are used by state, district and sub-district level officials/staff responsible for entering Nikshay and Nikshay-Aushadhi data. The arrangement of Sim Card and their tariff plans for internet facility to be done by the state through PIP. The person handling the device (PC-Tablet) is responsible for any damage /loss of same.

4. Supervision and Monitoring of TB medicines:

Role of State /District TB Officers/ MO-TCs in PSM activities under NTEP:

The STOs / DTOs / MO-TCs have a vital role in implementing NTEP Procurement & Supply Chain management guidelines and ensuring effective drug management systems in the state/districts.

The key responsibilities of the STO/DTO/MO-TC include the following:

- Overall supervision of State/District/TU Drug Stores operations and inventory management of drugs and consumables
- Implementation of Nikshay-Aushadhi and training of all concerned staff in

NTEP drug management and Nikshay-Aushadhi upto PHI level

- Review of drug stock adequacy at all levels through Nikshay-Aushadhi, ensuring their uninterrupted supply thereby preventing stock-outs and expiry of medicines
- To ensure regular updation of inventory in Nikshay-Aushadhi and timely submission of the drug request/reports of state/district/TU/PHI through Nikshay-Aushadhi
- Timely corrective action to prevent drug expiry through necessary transfers of medicines to other needy nearby State Drug Store (SDS)/District Drug Store (DDS)
- Effective and timely distribution of drugs through a well-defined transportation mechanism

- Distribution of 2nd line drugs should be in the form of monthly boxes only from SDS/DDS to TUs/PHIs, as per NTEP guidelines and weight bands
- Timely action to redistribute drugs to prevent local shortages

Points to remember

- Uninterrupted supply of drugs and other materials is critical to the success of TB Control Programme.
- Drug requirements are based on the number of cases, existing stocks, and reserve stocks.
- Maintenance of drug stock should be as per FEFO.
- Reserve stocks are required to account for unexpected increase in TB case load, delays in procurement and distribution of drugs, improper distribution of drugs, and pilferage of drugs or lost due to improper storage.
- Ensure regular physical verification of drugs and other materials at all levels.
- Reserve drug stocks should be available at SDS, DDS, TU and PHI as per NTEP stocking norms.
- Ensure regular use of Nikshay-Aushadhi at all levels for NTEP drug management.
- Ensure regular training of field staff on NTEP drug logistics management and Nikshay - Aushadhi
- AMC of LED-FM, BMs & IRL equipments and regular maintenance of vehicles should be ensured.

5. Nikshay Aushadhi:

To improve the availability of TB drugs in all the healthcare facilities across the country through an interactive software system that enables real time status of drug inventory. Programme in support with C-DAC has customized and developed a Web Based Application-Drug and Vaccine Distribution Management System (DVDMS) for the management of Anti TB Drugs and other commodities under NTEP. The software has been formally named as "Nikshay Aushadhi".

Nikshay Aushadhi is a web-based application which deals with the management of stock of various Anti TB Drugs and items required by various State-Drug Stores, District Drug Stores, TUs and Sub stores (PHIs) of Nation. Nikshay Aushadhi helps to determine the needs of various sub-stores such that all the required drugs are continuously issued by State Drug Stores to its sub-stores without delay.

5.1 Modules Available in Nikshay Aushadhi:

- Quantification, Forecasting
- Drug Request Management-Routine request/Additional Drug Request
- Issue/Dispatch (GMSDs to SDSs – DDSs – TUs –PHIs)
- Receipt of drugs from Store (PHI, TU, DDS, SDS, GMSD)/Acknowledge Desk
- Return from Patient to concerned Store for reconstitution
- Stock Management (like Drug Inventory, Physical Stock Verification, Expiry Management etc)
- Packaging/Repackaging (2nd Line drugs Box Preparation)
- Quality Control Management
- Miscellaneous (Reports)

5.2 Advantage of Nikshay Aushadhi:

- Helps Programme Managers in better monitoring & control down the line through especially designed DASH BOARD
- Help in better Planning & Execution at all administrative level
- Efficient control on supply & Inventory
- Quality Control and monitoring of Drugs and consumables
- Online Drug Distribution from centre to last storage point and to Patient
- Integrated with Nikshay for patient diagnose, treatment and follow-up detail
- Accessibility on PC-Tablets and Mobile phone through 'Mobile App'
- Expiry and pilferage of drugs & consumables can be minimized.
- 24 x7 Help & Solution Desk for Users

5.3 Key Features of Nikshay Aushadhi:

- Online Indenting. (from State to CTD, DDS to SDS, TU to DDS on quarterly basis and PHI to DDS on monthly basis) beyond this through an Additional drug request (ADR) as and when an increased consumption expected.
- Online issue of Drugs based on request and availability.
- Provision to maintain expiry date / shelf life for all items.
- Quality Control for Drugs.
- Ability of online tracking of Drug Inventory in all NTEP Institutions across the State.
- Help in better planning, execution and control on demand and supply.
- Ability to generate customized Reports.
- Various alert generation facility with different colours e.g. for expired items, near to expiry, not of standard quality etc.
- Ability to locate drugs using a Box/TB/ batch number of search criteria in all TB Institutions.
- Inter State / District Drug Transfer with proper control by CTD/State.
- Bar Code/QR code implementation for unique identification and easy, fast & accurate receipt/issue of drugs.

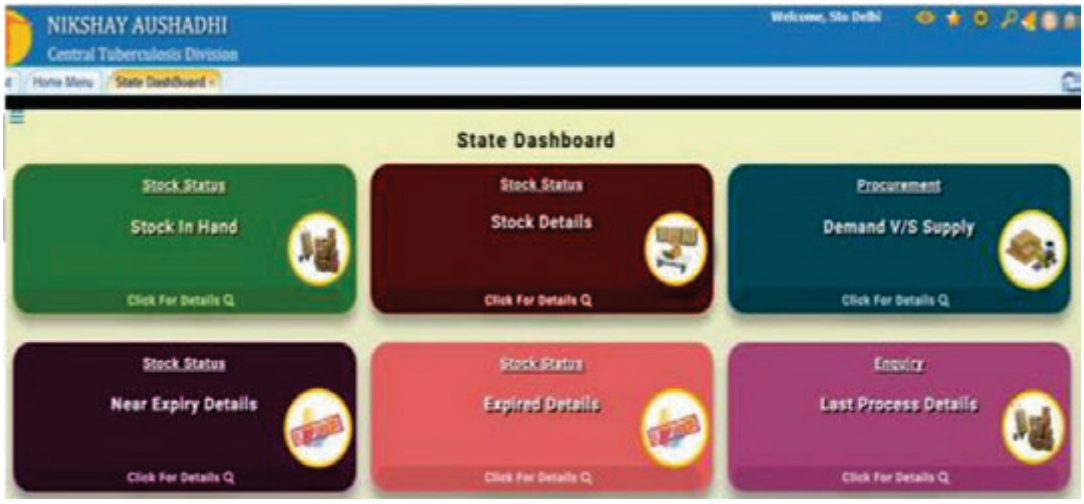
5.4 Drug Logistics for Private Sector / Partners:

5.4.1. For Registered private practitioners/medical stores/other partners under Nikshay - If private practitioner/medical stores/other partners etc. are registered in Nikshay as PHI, drugs will be issued from their concerned TUs.

5.4.2. For non-registered private practitioners/ medical stores/ other partners under Nikshay-drugs will be issued as 3rd party option and consumption of same should be recorded as 'Misc. consumption' in Nikshay-Aushadhi.

5.5 Output from Nikshay-Aushadhi:

5.5.1 Customised Dashboard for National, State and district level officials -



5.5.2 Stock in Hand Report (1st Line Drugs)

Report Name: Stock In Hand Report, As on Date: 01-Feb-2019

S.No.	Drug Name	Item Type	Active Stock Qty.
TB Category : First Line Drug			
TB Sub Category : Adult_Pediatric			
1	2FDC (P) (H50 & R75) [DSTB-CP(P)]	Blister	160
2	3FDC CP (A) (H75,R150 & E275) [DSTB-CP(A)]	Blister	720
3	3FDC(P) (H50, R75, Z150) [DSTB-IP(P)]	Blister	171
4	4FDC(A) (H75, R150, Z400 & E275) [DSTB-IPA]	Blister	360
TB Sub Category : Loose Drugs			
5	Ethambutol 100mg [PC48]	Tablet	13900
6	Isoniazid 100 [PC7]	Tablet	9000
7	Rifampicin 150 [PC6]	Capsule	900
8	Rifampicin(450) [PC12]	Capsule	1170

5.5.3 Stock in Hand Report (2nd Line Drugs

Report Date and Time : 01/02/2019 13:40
Username : Dds Shimla

Government of India | Central Tuberculosis Division
Directorate General of Health Services

Report Name: Stock In Hand Report, As on Date: 01-Feb-2019

S.No.	Drug Name	Item Type	Batch No.	Expiry Date	Supplier Name	Active Stock Qty (in No.)
TB Category : --						
TB Sub Catgeory : --						
1	Conventional MDR TB Regimen Type A (30-45 Kg) [RRA2]	Patient Wise Boxes	1860013760	Jul/2019	-	4
TB Category : Second Line Drug						
TB Sub Catgeory : Conventional Mdr Tb Regimen						
2	Conventional MDR TB Regimen Type A (46 -70Kg) [CRA3]	Patient Wise Boxes	1860013761	Jul/2019	-	4
3	Conventional MDR TB Regimen Type A (46 -70Kg) [CRA3]	Patient Wise Boxes	1860017101	Jul/2019	-	14
4	Conventional MDR TB Regimen Type B (46-70Kg) [RRB3]	Patient Wise Boxes	1860014809	Jul/2019	-	6
TB Sub Catgeory : Regimen For H Mono/Poly Drtb						
5	INH Mono/Poly Regimen:Type A:(30-45 Kg) [2HRA2]	Patient Wise Boxes	1860013764	Jun/2019	-	2
6	INH Mono/Poly Regimen:Type A:(46-70kg) [2HRA3]	Patient Wise Boxes	1860015039	Jun/2019	-	5
TB Sub Catgeory : Shorter Mdr Tb Regimen						
7	Shorter MDR TB Regimen:Type A(30 -45 Kg) [2SRA2]	Patient Wise Boxes	1860010931	Jul/2019	-	2
8	Shorter MDR TB Regimen:Type A(46 -70kg) [2SRA3]	Patient Wise Boxes	1860013763	Jul/2019	-	7
9	Shorter MDR TB Regimen:Type B(30-45 Kg) [2SRB2]	Patient Wise Boxes	1860010287	Sep/2019	-	1
10	Shorter MDR TB Regimen:Type B(30-45 Kg) [2SRB2]	Patient Wise Boxes	1860014805	Jul/2019	-	2

5.5.4 Stock in Hand Report (2nd Line Loose Drugs)

Report Date and Time : 01/02/2019 13:45
Username : Dds Shimla

Government of India | Central Tuberculosis Division
Directorate General of Health Services

Report Name: Stock In Hand Report, As on Date: 01-Feb-2019

S.No.	Drug Name	Item Type	Batch No.	Expiry Date	Supplier Name	Active Stock Qty.(in No.)
TB Category : Second Line Drug						
TB Sub Catgeory : Loose_Drugs						
1	Clofazimine 100mg [PC40]	Tablet	CC1726	Nov/2019	Sangrose Laboratories	310
2	Ethambutol 400 mg [PC45]	Tablet	AS8C4311	Apr/2021	Lupin Ltd	1200
3	Ethambutol 800 mg [PC10]	Tablet	17007	Aug/2020	Ms Cadila Pharmaceuticals Ltd	300
4	Ethionamide 250 mg [PC20]	Tablet	NEA742A	Sep/2021	Macleods Pharma Ltd	80
5	Inj Kanamycin 500 [PC17]	Vial or Kit	DKN743A	Jul/2019	-	206
6	Isoniazid 300mg [PC11]	Tablet	VQ642	Nov/2021	-	2340
7	Linezolid 600 [PC38]	Tablet	BLN702A	Jun/2020	Macleods Pharma Ltd	130
8	Linezolid 600 [PC38]	Tablet	BLN704A	Sep/2020	Macleods Pharma Ltd	300
9	Moxifloxacin 400 [PC39]	Tablet	BT1702117A	Jan/2021	-	600
10	Pyrazinamide(500) [PC8]	Tablet	PRBBH0023	Jun/2021	-	90
11	Pyrazinamide 750mg [PC23]	Tablet	T180660	May/2021	Micron Pharmaceuticals	180
12	Pyridoxine 100mg [PC26]	Tablet	2BP2C008	Jul/2019	Macleods Pharma Ltd	1800
13	Pyridoxine 100mg [PC26]	Tablet	2BP2E004	Apr/2020	Macleods Pharma Ltd	2880
14	Pyridoxine 100mg [PC26]	Tablet	2BP2E009	Jun/2020	Macleods Pharma Ltd	1620
15	Pyridoxine 100mg [PC26]	Tablet	2BP2E016	Sep/2020	Macleods Pharma Ltd	3300
16	Pyridoxine 100mg [PC26]	Tablet	EPA6720A	Jul/2019	-	600
17	Pyridoxine 100mg [PC26]	Tablet	WBA36009	Oct/2019	Macleods Pharma Ltd	390

5.5.5 Quarterly Report on Drugs & Logistics(QRDL)

Print Date and Time:
01-Feb-2019 14: 56
User Name Sds Telangana

Government of India | Central Tuberculosis Division
Directorate General of Health Services

Worksheet For Reporting Drug Requirement (WRDR:DTC) For Store Name: SDS Telangana From Jan-2017 To Jan-2017

S.NO.	STORE NAME	STOCK ON FIRST DAY	STOCK RECEIVED	STOCK TRANSFERRED IN	RECONSTITUTION OF BOX	TOTAL AVAILABILTY OF DRUGS (f=b+c+d+e)	STOCK ISSUED	STOCK TRANSFERRED OUT	TOTAL STOCK ISSUED	TOTAL CONSUMPTION	STOCK ON LAST DAY [k=(f-g-h-j)]	QUANTITY REQUESTED[(for TD:(j)/3 x 4) -k][[for DTC:(j)/3 x 7)-k]
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1	DOS Adilabad	0	0	0	0	0	0	0	0	0	0	0
2	DOS Asifabad	0	0	0	0	0	0	0	0	0	0	0
3	DOS Bhadrachalam	0	0	0	0	0	0	0	0	0	0	0
4	DOS Gadwal	0	0	0	0	0	0	0	0	0	0	0
5	DOS Hyderabad	0	0	0	0	0	0	0	0	0	0	0
6	DOS Jagityal	0	0	0	0	0	0	0	0	0	0	0
7	DOS Janagaon	0	0	0	0	0	0	0	0	0	0	0
8	DOS Jayashankar	0	0	0	0	0	0	0	0	0	0	0
9	DOS Kamareddy	0	0	0	0	0	0	0	0	0	0	0
10	DOS Karimnagar	0	0	0	0	0	0	0	0	0	0	0
11	DOS Khammam	0	0	0	0	0	0	0	0	0	0	0
12	DOS Mahabubabad	0	0	0	0	0	0	0	0	0	0	0
13	DOS Mahbubnagar	0	0	0	0	0	0	0	0	0	0	0
14	DOS Mancherial	0	0	0	0	0	0	0	0	0	0	0
15	DOS Medak	0	0	0	0	0	0	0	0	0	0	0
16	DOS Medchal	0	0	0	0	0	0	0	0	0	0	0
17	DOS Nagarkurnool	0	0	0	0	0	0	0	0	0	0	0
18	DOS Nalgonda	0	0	0	0	0	0	0	0	0	0	0
19	DOS Nirmal	0	0	0	0	0	0	0	0	0	0	0
20	DOS Nizamabad	0	0	0	0	0	0	0	0	0	0	0
21	DOS Peddapalli	0	0	0	0	0	0	0	0	0	0	0
22	DOS Rangareddi	0	0	0	0	0	0	0	0	0	0	0

ANNEXURE I: APPROXIMATE LABORATORY REQUIREMENT FOR 3000 SLIDES FOR SPUTUM SMEAR MICROSCOPY

Reagents/ Equipment for staining	Quantity
Binocular microscope with 10x, 40x and oil immersion objective (100x) eyepieces (10x) and spare bulbs and fuses	Atleast 1 per DMC
Plastic disposable sputum containers	3,300
Slides for microscope, 25*75 mm, 1.1 mm-1.3 mm thick	3,300
Broom stick 10 cms length	3,300
Diamond marker pencil	1 number
Timer, 30 or 60 minutes	1 number
Forceps, Chitel forceps stainless steel for slides 15 cm	1 number
Scissors, 25 cm stainless steel	1 number
Slide rack, Staining slide rod of metal or plastic or glass for 12 slides	2 numbers
Slide boxes, For 100 slides	33 boxes + 1-2 per DMC for RBRC
Tissue rolls	4 numbers
Grease marking pencil	12 numbers
Absorbent cotton, 500 gms/ roll	4 numbers (2 k.g)
Pressure cooker, For disposal by autoclaving	Optional
5% phenol	600 litres
Methylated spirit	3 liters
Aprons	2
Disposable gloves, 6 and 8 inches (box of 25 pairs)	12 boxes
Spirit lamp,	1 number
Metal wire, For swab for heating of Carbol fuchsin	1 number
Sputum specimen transport box, Insulated box, made of plastic 10" x 10" x 10", thickness 1" with lid, handle and nylon belt 1" width 2.5 feet length, nylon strap of 1" width 2 feet length with Velcro to strap the lid of the box from side to side.	2 numbers

For preparation of reagents at DTC/TU

Reagents/ Equipment for staining	Quantity
Basic fuchsin, Pararosaniline hydrochloride, C_{19} H_{18} N_3 Cl, molecular wt: 323.8, Colour: Metallic green, Dye content: Should be available on the container. Approximately 85%-88%	300 Gms
Carbolic acid (Phenol), C_6H_5OH, and molecular wt: 94.11, Melting point: 40^{0}C, Solidification point: 40.5^{0}C, Purity: 99.5%	2 ltrs
Sulphuric acid: H_2SO_4, molecular wt: 98.08, Purity: 95-97%, Colour: Clear	10 ltrs
Methylene blue, (Methylthionine chloride), $C_{16}H_{18}ClN_3S$, molecular Wt: 319.9 Dye content: Should be available on the container. Approximately 82%	32 Gms
Alcohol (absolute)	3.2 ltrs
Funnel, 7" dia 7" height and 5" stem height	4 nos.
Funnel, 3" dia 4" height and 5" stem height	4 nos.
Drop bottles, Glass/ plastic 100 ml capacity	8 nos.
Bottles for storage of stock solutions, Brown bottles 2 litre capacity	4 nos.
Flat bottom round flask, Capacity 3 litres of pyrex of glass	5 nos.
Wash bottle, Plastic 500 ml	6 nos.
Drop plastic bottle for immersion oil, 10 ml capacity	2 nos.
Disposable bucket, Plastic foot operated 12 liters	2 nos.
Measuring cylinder, 1000 ml capacity plastic or glass	4 nos.
Measuring cylinder, 100 ml capacity plastic or glass	4 nos.
Water tanks, Plastic with tap, 100 liters where there is no running water facility.	1 no
Filter paper, Whatman no. 1 packs of 100 2" * 2"	1 box
Adhesive labels for sputum containers	6 rools
Soap, soap box towel and clean rags as needed	As requirement
Aluminum vessel, for the purpose of carbol fuchsin solution preparation 16" diameter 9" height	1 no.
Water bath, for the preparation of carbol fuchsin	1
Beaker, 250 ml with spout	1 no.
Display board	1 no.
Distilled water (instead of distillation apparatus)	35 liters
Stove wick type/ Bunsen burner with butane gas cylinder/ burner with gas cylinder	1

Laboratory reports and records

Laboratory form for sputum examination	2200
Tuberculosis laboratory register	2

ANNEXURE II: NUMBER OF TUBERCULOSIS FORMS AND REGISTERS NEEDED IN THE NTEP

Names of tuberculosis forms and Number needed registers	
Tuberculosis Treatment Card	2 per patient
Tuberculosis Identity Card	1 per patient
Tuberculosis Notification Register	1 each for a PHI per year
Tuberculosis Laboratory Register	1 per year per microscopy Centre
NTEP request form for examination of biological specimen for TB	15 per new pulmonary smear- positive case
Mycobacteriology Culture / Sensitivity Test Form	Number determined by State tuberculosis Officer
Quarterly Report on Programme Management and Logistics	PHI: (3 copies x 12 months) x No. PHIs in district Sub-districts: (2 copies x 4 quarters) x No. TUs in District District: (4 copies x 4 quarters) copies
Tuberculosis Transfer Form	Based on proportion of patients who were transferred out of the district during the preceding year. Estimate 1 for 20 patients.
Supervisory register	As per No. of PHIs
"Referral for treatment" forms	As per requirement
Referral for treatment register	1 each for Medical College, big Hospital, etc

ANNEXURE-III

SOLUTION TO STOCK REGISTER EXERCISE:

STOCK REGISTER (SR)

Drug Item: DSTB-IP(A) **Unit of Measurement (UOM):** Strip of 28 Tabs **Folio No. :**

SL. NO.	Particulars Of Receipts & Issues							Receipt (Qty.)	Issue (Qty.)	Balance (Qty.)	Date-Wise Expiry Details Of Balance (Qty.)				Signature of Store-Keeper	Remarks
	Date (Dd/ mm/ yy) of Transaction (Receipt/ Issue)	Name of Party (GMSD/ SDS/ DTC/TU)	Receipt Voucher No. (For Receipts only)	Issue Voucher No.(For Issues only)	Date of Issue Voucher	Batch No.	Date of Expiry				Expiry Date (Aug-20)	Expiry Date (Oct-20)	Expiry Date (Nov-20)	Expiry Date (Dec-20)		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1	1.04.18	**Op Balance**	-	-	-	XY	Aug-20	0	0	1000	1000	0	0	0		
2	10.04.18	GMSD Karnal	IV-35		1.04.18	AB	Oct-20	6000	0	7000	10	600	0	0		
3	15.04.18	GMSD Mumbai	IV-14		8.04.18	CD	Nov-20	5000	0	12000	10	6000	50	0		
4	17.04.18	DTC-A		SIV – 1	17.04.18	XY	Aug-20	0	1000	11000	0	6000	50	0		
	17.04.18	DTC –A		SIV – 1	17.04.18	AB	Oct-20	0	2000	9000	0	4000	50	0		
5	25.04.18	SDS – Delhi	DTA- 68		12.04.18	EF	Dec-20	1000	0	10000	0	4000	5000	1000		
6	26.04.18	DTC-B		SIV – 2	26.04.18	AB	Oct-20	0	4000	6000	0	0	5000	1000		
7	29.04.18	DTC – C		SIV – 3	29.04.18	CD	Nov-20	0	4000	2000	0	0	1000	1000		

MODULE 7

PARTNERSHIPS

Introduction

Synergistic efforts of all stakeholders involved in TB services are the key to realizing the goal of TB elimination. Studies have shown that almost 80% of the outpatient care sought in India, are from private health care providers. Private health sector provides flexible timing, personalized care, family rapport, 'client demand' (though sometimes overlooked medical responsibility), which influences patients' choice. Access to healthcare cannot be seen as the sole responsibility of the Government. Private sector plays a crucial role in providing health services and their capacity should be harnessed to achieve goal of universal health coverage. The private health sector can help improve the reach and access of the Programme, and public sector can ensure quality of services through capacity building and regulatory measures.

The role of private sector is not limited to health or medical services alone. There are many ways private establishment can contribute to a larger cause, i.e., Ending TB in India. Many high-wealth private establishments have an intention to contribute to societal cause. At times, their philanthropic intentions lack ways and means of doing so. TB patients are central to any interventions under NTEP.

Reaching TB patients in the private sector and managing them need different approaches; this chapter gives details on the steps to be undertaken and measures to be followed to accomplish this task effectively. Financial arrangements for partnerships with not-for-profit and for-profit organizations have been covered under the partnership guidelines. Within the Health Department, NTEP sees a big role of Medical Colleges, and Coordination with Other Programmes and Divisions to expand services, address comorbidity, intensified case finding and special care of clinical risk groups. Inter-ministerial coordination has been incorporated to expand services, patient support and address determinants of disease through public sector departments and corporates.

Definitions

Partner: Any registered establishment which would include NGOs, CBOs, federation of SHGs, Registered Medical Practitioners (Allopathic/AYUSH), clinics, companies, nursing homes, hospitals, health care providers, individuals, organizations, bodies, agencies etc. Registration should be under any of the Indian laws / Acts including but not limited to Society Registration Act, Trust Act, Charitable Trust Act, Companies act, partnership firm, Cooperatives Act etc

Partnership means an arrangement between any two or more establishments; most often, government owned entity on one side and a private sector entity on the other, for the provision of public assets and/or public services, through investments being made and/or management being undertaken by the private sector entity, for a specified period of time. Such arrangements may have options of receiving performance linked incentives that conform (or are benchmarked) to specified and pre-determined performance standards, measurable by the public entity or its representative.

This concept of partnership is much broader as compared to previous approaches of Public Private Mix (PPM) under NTEP which entailed strategies that link all establishment within the private and public sectors (including health providers in other governmental ministries) to the national TB programme.

Health care providers in India

Ministry of Health	Other Ministries	Non-Government
• Directorate of Health (NTEP, Primary health care) • Directorate of Medical Education (Medical Colleges)	• Railways • Employees State Insurance (ESI) • Mining • Coal • Steel • Ports • Prisons • Armed Forces • Public Sector • Enterprises	• NGO • Private hospitals • Corporate industries • Private practitioners • Traditional practitioners (AYUSH) • Private Companies • Trust • Developmental partners • Professional associations • Civil Society Organization • Community Based Organization • Faith Based Organization

Role of various health care providers

Type of Service Provider	Referral	Lab Services	Clinical Eval.– Diagnosis	Rational use of ATT	Treatment support or facilitation of treatment support	Counselling	Patient Tracking	Reporting	Higher Med. Services	Planning	Capacity Building	Communication	Research	Resource Mobilization	Laboratory QA	Supervision, Monitoring, QA	Documentation	Accreditation-Certification	Pub-Pvt Coordination	Donor Coordination	Pvt-Pvt Coordination
1ai. *Primary Medical Service Providers* – stand-alone clinics of practitioners of modern medicine	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-
1aii. *Primary Medical Service Providers – stand-alone clinics of practitioners of indigenous systems of medicine and homeopathy, pharmacists and less-than-fully – qualified providers (the latter a.k.a quacks)*	Y	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-
1b. *Secondary Medical Service Providers – with laboratories and pharmacies*	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	-	Y	-	-	-	-	-	-	-	-
1c. *Tertiary Medical Service Providers – with higher specialties and function ; some may be medical colleges*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	-	Y	-	-	Y	-	-	-
2. *Implementing Agencies – may be NGO/INGO, CSO, CBO, FBO, Other*	Y	-	-	-	Y	Y	Y	Y	-	Y	Y	Y	Y	Y	-	Y	Y	-	Y	Y	Y
3. *Laboratories – large, networked (chain) or small*	Y	Y	-	-	-	Y	-	Y	-	-	-	-	-	-	Y	-	-	-	-	-	-
4. *Pharmacies – large, networked (chain) or small*	Y	-	-	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reaching and Supporting TB Patients who seek care from Private Providers

In order to attain universal coverage of TB services, every programme manager needs to make sure that all TB patients in the block or district or state should be covered – all patients should be identified (notified), provided quality diagnostic and treatment services (free of cost to the extent possible), ensure comorbidity and drug susceptibility testing of all TB patients, provide support to all TB patients for completion of treatment. It is therefore important that both public and private sector TB patients are taken into account while planning, budgeting and managing services for TB. All programme indicators – TB notification rate, patients put on treatment, HIV testing rate, drug susceptibility testing rates, and treatment outcome etc. should be monitored considering total TB patients as denominator (including private sector).

NTEP has a blend of collaborative and regulatory approaches to engage with private health care providers. Engagement is not a onetime process and a strong professional relationship with providers is the key to success in reaching out to the private sector patients and supporting them. Due diligence must be observed to ensure that the programme manager doesn't attempt to divert patients from private providers to the public system. Regulatory measures must also be used judiciously. A systematic approach to effectively manage TB patients who seek care from private providers is given below.

- Engagement of providers
- Linkage of services
- Patient support/ Public health actions
- Regulatory Measures
- Process of engagement

1. Engagement of providers –

Steps to engagement are map – prioritize – collaborate.

Mapping of providers- The first step to provider engagement will be complete census/ mapping of providers. All key providers including private doctors (both allopathy and AYUSH), chemists and laboratories need to be mapped. This will include any providers who are not set up in the public health facilities and also those who are managing TB patients outside NTEP including NGO, corporate sector, health facilities under other Ministries, Public Sector Enterprises etc. Line listing of all such providers should be prepared at every district level and should be updated at least yearly.

The DTO should review existing list of health facilities registered with NIKSHAY, professional associations (Indian Medical Association, Indian Academy of Pediatrics, Indian Chest Society, National Conference of Chest Physicians of India, Association of Physicians of India, etc.) or Government agencies like those of Clinical Establishment Act registry to prepare a comprehensive census of providers.

2. Prioritization of providers – Not all providers diagnose or treat TB. The DTO should assess the data and use this universal census as platform, identify the relevant providers and PRIORITIZE key providers for engagement with the program to achieve better efficiency in terms of patient coverage. Following should be considered for prioritization

- Practicing allopathic health facilities with their medical practice/care (in order of priority
- TB & Chest Diseases, Internal Medicine, Pediatrics, General Practitioner, other Medical Care, Surgical Care)

- Patient load or Respiratory patients or TB patient load
- AYUSH providers and their patient load.
- Pharmacies and their TB prescription load.
- Diagnostic laboratories with TB diagnostic services and their test load.

Other sources should be explored for more information on private providers. One such source is information from Schedule-H1 register to identify private practitioners / health facilities which are prescribing anti-TB drugs. Professional associations or pharmaceutical product marketing agencies/ personnel should be leveraged to undertake prioritization exercise and identify potential private practitioners for engagement.

3. Collaborate with private providers

- Once the private health care providers have been identified, the next step is to explain the details and purpose of collaboration. All providers should be registered in NIKSHAY as per the prescribed format. Registration is a onetime process, NTEP should take responsibility of registering health establishments with consent of provider. Alternatively, the providers can get registered themselves also.
- Large scale IEC and media campaign should be run throughout the year to encourage private practitioners for cooperation and collaboration. Self-explanatory steps of registration on NIKSHAY and notification should be disseminated to encourage private providers for self-registration and enable them to notify directly on NIKSHAY.
- The private providers need to be sensitized/ motivated either through in-clinic visits, continuing medical education (CME), personal communication, peer pressure or professional associations.
- Highlight the importance of the processes to be followed by NTEP staff/hired agency while motivating the providers. Operationalization of this process requires appropriate capacity building of NTEP staff. Enhancement of capacity of staff (like that of medical representatives) has a very big role to play in sustaining the relationship with providers.
- In case, the presence of private health care provider supersedes the capacity of NTEP to reach to everyone for effective engagement, programme managers can engage, any NGO or agency with experience or skill to engage private providers effectively.
- Informational presentations and discussions should be conducted to provide healthcare providers with valuable scientific and clinical information about TB management that may lead to improved patient care.
- **On-boarding kit** -After engaging or registering private health facilities, an on-boarding kit may be provided to the doctor, which may include:
  - Information brochure with purpose of notification and steps for notification.
  - Notification formats according to health facility (Practitioner/Hospital, Laboratory, Pharmacy).
  - List of centres with diagnostic/treatment services (public sector or private sector) with contact numbers of centres and NTEP staff for linkages to provide free test/drugs to TB patients.
  - Display of health facility ID and contact number of nodal person for notification (using sticker / poster).
  - Sputum collection containers/falcon tubes.

- FDC brochure and dosage charts/stickers.
- Brochure on diagnostic algorithm.
- Brochure on public health actions.
- Brochure on benefits to TB patients.
- Sample prescription of adult and pediatric patient as per NTEP.
- Contact details of DTO, PPM-coordinator, STS point of contact.
- Referral forms for testing and referral form for treatment.
- For engaged chemists who will stock FDCs, please provide separate drug stock registers to maintain medicine stocks and patients' details (as per NTEP drug stock register format).
- Toll Free number 1800-11-6666 to be placed on all material.

- **Facilitating and updating TB notification** and other relevant information in Nikshay. Once private health establishment received the Health facility Identification number (HFID), the doctors shall be trained on how to notify using various methods. Different methods of notification are as follows:
- **Notification** can be done electronically directly from Health Establishment on the NIKSHAY portal using, login using their respective credentials

Through Web:

Visit website - https://nikshay.gov.in

Choose Private in the Sign-in to Nikshay Panel.

Enter User ID (Health Establishment ID) and Password (registered mobile number)

Through Android Mobile app:

Download APK file from the website https://nikshay.gov.in.

Enter User ID and password to log in

- Submission of the soft copy of reporting form to the Nodal Officer for TB Notification by authorized Email.
- Submission of hard copy of the TB notification forms to the Nodal Officer for TB notification (usually District TB Officer) by post or by courier or by hand.
- In States/UTs or districts where the bilateral understanding is established between the Health Establishments and the local public health authorities for convenient local TB notification, the information on TB Notification can be submitted to the local public health authorities (e.g. Medical Officer of the Primary Health Centre) as designated by the district nodal authority for TB notification. However, this should be done only in consultation with the concerned district nodal officer for TB notification.
- Submission of information for TB Notification by using authorized mobile numbers by phone call on 1800 11 6666
- If an external agency is hired- The PPSA-NGO will act as an interface between the NTEP and the providers to coordinate and ensure HFID for all providers. The HFID and password can be used by the provider to notify the cases. Additionally, the PPSA personnel may use the same ID to notify, update the patient follow up, FDC prescriptions etc. In such case, there should be bilateral understanding established between the Health Establishments and the Interface Agency for convenient notification which is designated for receiving notification from private providers by the Nodal officer for TB

notification. However, this should be done only in consultation with the concerned district nodal officer for TB notification and the interface agency should adhere to all confidentiality measures and provisions under the EHR/EMR Act.

- Notification is not the last step; it is the beginning of engagement with private providers. The private health establishments are key for facilitating linkages for free testing and drugs for TB patients and for any public health action in that manner. TB patients will follow best when advised or prescribed by his/her care provider. Hence, for HIV testing and DST, private providers need to be sensitized and pursued to prescribe those testing, either refer at appropriate facility or provide sample collection arrangement or engage with in-house laboratory with quality assured services. Similarly, private providers need to counsel patients for contact investigation, prescribe chemoprophylaxis and inform about benefits under the NIKSHAY Poshan Yojana.
- Most private providers cannot provide adherence support and track patients for treatment. Adherence support options should be detailed to private practitioners. He/She then prescribe the adherence support plan for patients. It is the responsibility of public health team to make available tool and facilities for drug refilling monitoring, self reporting through call centre, 99 DOTS sleeves, MERM Box, ZMQ app (Video DOT app), biometric adherence devise to treatment supporter, or treatment supporter, if patient and provider agrees to.
- The programme should encourage private practitioners to undergo trainings through recognized training modules for self-learning or certification of providers as a part of capacity building and recognition of providers like training module for medical practitioners developed by the ICMR, digital module developed by CTD & IMA.
- The NTEP should lead the sensitization programs for all registered providers and their supportive staff. These meetings are crucial to orient the providers to STCI, introduce the health workers, distribute formats, and provide contact details of key members.
    - Receptionist / Assistant / Supportive Staff to the private practitioners / private health facilities play key role in coordination and information management. Adequate communication and capacity building of these staff has to be undertaken. These supportive staff should be trained on process to follow for notification, linkage of any testing, linkage for free drugs, follow up and any update of information on NIKSHAY.
    - In major hospitals or laboratories or pharmacies, wherever possible, using their MIS to send information will be useful to have seamless communication of information.
- Once engaged, continued interaction and coordination are needed with providers to sustain the rapport. A 'customer service' approach and procedures for that like feedback system, grievance redressal system, and recognition/reward system for following good clinical practices should be established.
- Professional associations have a key role to play in reaching to TB patients who seek care outside public sector. Their support is needed right from mapping of providers to ensuring treatment outcomes of every TB patient. They are key resources for dissemination of knowledge on diagnosis and treatment guidelines in NTEP and Standards for TB Care in India. Formal engagement with these organizations will help district and state programme manager to influence providers, endorsements, and mobilize providers at a scale.
- An option of contracting a professional agency may be considered especially when private providers are in large numbers like in urban area. In such cases, the interface agency (professional agency or NGOs) will be hired as Patient Provider Support Agency

(PPSA) to conduct mapping of private health care providers and will be responsible for their end-to-end engagement.

Pharmacist / Chemists involvement

The following interventions are indicated to be delivered through pharmacist engagement.

- Pharmacists should be involved for early identification and referral of presumptive TB cases for diagnosis, treatment support for TB patients, patient education and counselling on completion of treatment, promoting rational use of Anti-TB drugs (do not provide anti-TB drugs without prescription of qualified providers), contributing to preventing the emergence of drug resistance, and maintaining records of sale of anti-TB drugs as per the prescribed format under Schedule H1
- Private pharmacies should be involved in dispensation of anti-TB drugs supplied from NTEP to give access to TB patients who seek care in private sector, after consultation with private practitioners. To support the pharmacies for arranging such mechanism for keeping NTEP supplied FDC, DTO may consider incentives to such pharmacies. NTEP should also arrange for regular uninterrupted drug supply. Monthly PHI report should be used for drug inventory management.
- Take support of Association of pharmacies for advocacy, sensitization, influencing private pharmacies to collaborate with NTEP.

Laboratory involvement

Laboratories are engaged for notification as well as for offering free and quality services to TB patients who do not seek care from public sector, or to expand capacity of public sector laboratory services.

- To reach to TB patients at the earliest, NTEP set up a system of notification from laboratories. A separate notification format has been prescribed and to be used for getting notification from laboratories.
- Microbiological confirmation is a quality parameter that NTEP is striving to improve for TB patients who are managed in private sector. Facilitating laboratory services for microbiological testing is one opportunity. Private providers have preference to get their patients tested in private laboratories. Engagement with private laboratories and working in tandem with these laboratories will help to ensure free microbiological tests for TB patients. Laboratories should be engaged through partnership options, as detailed in the Guidance Document on Partnerships (2019), to ensure free diagnostic tests for TB patients.
- Additionally, to facilitate use and access to affordable and accurate tests endorsed by the World Health Organization (WHO) and the NTEP, Initiative for Promoting Affordable, Quality TB Test (IPAQT) mechanism is operational in the country. Under this initiative, several private laboratories in India have agreed to not exceed negotiated, ceiling prices for patients, notifying the government of the cases diagnosed, promoting the use of these tests and in exchange, they would get reagents at significantly reduced prices. If complete free services could not be set up by any reasons, use of IPAQT mechanism will help in reducing the expenditure on diagnostics.

AYUSH Providers Engagement

There is large number of AYUSH providers in India and many a times, they are the first presence of care due to ease of availability and flexibility of time and lower cost of care. An efficient symptom identification and referral system may be established to enable early diagnosis. Role of AYUSH providers will be identifying symptomatics, facilitating referrals, dispensing anti-TB drugs prescribed by allopathy practitioner/NTEP, treatment support (DOT) and ensuring follow up examination as per schedule prescribed by treating practitioner or NTEP

Incentives & Enablers to the private providers

a. Private Providers will be provided incentives to promote TB case notification, and reporting of treatment outcome. Rs. 500/- are to be provided for notification and Rs. 500/- for reporting of treatment outcome.

b. Another Rs 500 as incentive is provided to any informant who refer presumptive TB patients to public sector laboratory and found to be diagnosed as TB. Any private provider (private health establishment, pharmacy, AYUSH providers) also can avail this benefit. Hence, the providers who agree to use only NTEP services should be supported with these incentives.

c. There is provision of incentive to treatment supporters and to community volunteers who supports TB patients for treatment adherence during the treatment. Rs 1000 is provisioned for new & Previously treated TB patients and Rs 5000 is provisioned for providing treatment of drug resistant TB cases. Over and above Rs 25/ injection prick is provisioned for health care providers. These provisions are for patients in public sector as well as private sector. If private providers are agreeing to provide treatment support as per NTEP guidelines, he/she is eligible for treatment support honorarium.

II Linkage of services -

a. Linking diagnostic services from public and private sector

- Sensitize private providers and pursue with scientific information to increase use of molecular tests for diagnosis of TB.
- Orient the providers on the use of free X-ray, smear microscopy, molecular technology like CBNAAT, TrueNat, which are available either at public sector laboratory or at the empanelled provider lab in the vicinity. The provider will share a voucher with the patient who goes to the lab for X-ray.
- District TB team/PPM-coordinators/PPSA have to organize the logistics and route map of the sample pick-up and delivery to the closest laboratory.
- In parallel, the district NTEP team/PPSA-NGO should ensure to provide enough consumables forecasted for additional samples expected from private practitioners at X-ray facilities or TB laboratories. The technicians at the lab need to be sensitized on the additional sample load, the expected turn-around time, and on using Nikshay.
- The coordinator has to sensitize support staff of private providers to follow minimum recording procedures to track results, turn-around-time and quality of linkage services.

- For ease of access to diagnostic services, an efficient specimen collection and transport system for collecting and transporting samples from private health facilities to public sector or empaneled private sector laboratories should be established. This may be out-sourced to a courier agency or NGOs/Volunteers may be engaged with incentives/honorarium to be paid.
- The NTEP team needs to ensure forecasting and procurement of adequate diagnostics for the patients in private sector. Effective provider and patient friendly linkages to support delivery of these services to meet the need of private health care providers will increase uptake of these free services provided by the programme.
- There will be instances when the programme needs to purchase diagnostic services, such as when demand for rapid diagnostic tests or chest X-Ray exceeds availability in public facilities or when patients and their providers exhibit string preference for private channels. In such cases, services provided by the private sector will be reimbursed considering market rates of diagnostic tests.
- Identify and engage with X-ray labs, CB-NAAT labs, or culture DST laboratories in the private sector in the vicinity, if required, to ensure free diagnostic services for all TB patients seeking care from the private sector.
- District NTEP team/PPSA-NGO has to ensure that payments to X-ray labs, chemists, and CB-NAAT labs are timely processed. Wherever vouchers are used, ensure provision of vouchers to the doctors.

b. Providing NTEP-provided free anti-TB drugs

- For access to daily FDC from programme, the drugs need to be provided to the doctor, chemist, stockist or distributor, depending on the local context.
- Identify private practitioners or chemists in the vicinity of private providers to stock FDC supplied from NTEP for dispensing free drugs to TB patients.
- Orient the providers on the use of free FDCs available at the provider and chemist in the vicinity.
- In parallel, the district NTEP team/PPSA-NGO should ensure to provide adequate quantity of drugs to the identified chemists; and ensure that registers on opening stocks, closing stocks, and drug consumption are maintained.
- The NTEP team need to ensure forecasting and supply of adequate drugs to provide for patients in private sector. Effective provider and patient friendly linkages to support delivery of these services to meet the need of private health care providers will increase uptake of free services provided by the programme.
- Wherever required, incentives will be provided to cover cost of stocking, distributing and dispensing the FDC.
- Wherever vouchers are used, the doctor prescribes the medicine and provides a voucher to allow the patient to collect one-month dosage of FDCs free of cost from the empanelled chemist.
- District NTEP team/PPSA-NGO should ensure that payment to chemists, are duly processed.

III Patient Support / Public Health Action

Public health response to all TB patients notified from private sector will be the responsibility of public health system. NTEP team needs to provide Public health actions to all TB patients notified by private sector.

However, beginning of any public health action occurs from private providers. The doctor should be convinced of all activities of public health action. Plan of provision of these services i.e., through public health staff, by private provider or linkage from public facilities should be worked out in consultation with private doctors. Public health action should be integral component of counselling of TB patients, carried out by private doctor. Adequate pictorial material should be provided to private doctor to facilitate such counselling and effective communication

Moreover, though TB patients are notified from cities, they eventually go back to their residential area which may be rural. These patients may continue to take treatment from the same private doctor at regular consultation or may change provider (which is also a frequent phenomenon). In both case, health worker of the TB Unit of residence of TB patients will be responsible for undertaking public health action. Hence, TB Unit / District should remain vigilant to take timely action with regular review of transferred-in patients.

Contact the patient once TB diagnosis is confirmed and offer support in the form of counselling, either telephonically or in person (preferably) with due verbal consent, to ensure treatment adherence; and collect the required details for the DBT schemes.

Contact investigation: Private doctor/ health worker should enquire about all household contacts and ask for symptoms of TB either at clinic or at home. Person with symptoms of TB should be investigated by doctor or referral should be arranged to ensure investigations.

Chemoprophylaxis: Children aged 5 years or less, after ruling out active TB, doctor/staff should counsel family and prescribe INH for prophylaxis. NTEP should arrange availability of INH at private clinic or nearby pharmacy.

HIV & Diabetes Testing: The doctor should be informed to counsel the patient to undergo HIV testing and diabetes screening for comorbidity detection among all TB patients. NTEP should facilitate establishment of linkages through Refer to the nearest Govt. ICTC (Integrated Counselling and Testing Centre)

Refer to nearest private laboratory which is established as full-fledged ICTC or testing kits are provided by NACO or functioning as only reporting unit under NACO through PPP model

Collection of sample from private health facility to transport to nearest ICTC

- For those diagnosed with HIV, NTEP is responsible to facilitate referral and ensure patients reach the nearest Anti-Retro Viral Treatment (ART) Centre for further treatment.
- Drug Susceptibility Testing (DST): The doctor should be informed to counsel the patient to undergo drug susceptibility testing among all detected TB patients. To facilitate linkages, any of the following options may be adopted by the district depending on local context.

Private doctor / health worker refers TB patients to nearest molecular diagnostic laboratory

Collect sample and transport to nearest TB laboratory

Training of manpower and/or provision of consumables in private laboratory

Empanel and Purchase drug susceptibility / CBNAAT services in private laboratory

– For those diagnosed with drug resistant TB, NTEP is responsible to facilitate referral and ensure patients reach the nearest drug resistant TB treatment Centre (DRTBC) for further treatment. Alternatively, to facilitate management of drug resistant TB patients, patient

can be managed at private clinics. In such cases, free pre-treatment investigation either at public or empaneled private laboratory has to be ensured, private hospital to be engaged through partnership options as outdoor or indoor drug resistant TB centres. Guidelines of programmatic management of drug resistant TB (PMDT) for functional drug resistant TB centres to be followed by private provider.

- Adherence support: In consultation with private providers, adherence plan for each TB patients has to be designed and followed. Private doctor will counsel TB patients for regular treatment. All TB patients should be supported with at least monthly intake of drugs. Patient may be convinced to have at least family DOT with a treatment card or calendar to be marked by a caring family member observing the treatment. Patients should be encouraged to take up IT enabled adherence support system. Based on information received from such tool, health worker needs to follow up with the patient to ensure regular intake of medicine. If patients are not undertaking IT enabled support, weekly calls to TB patients has to be ensured preferably from the call centre. Alternatively, health staff may contact patients fortnightly to get information of adherence. Also, health worker will follow with patients as per the follow up schedule decided by the treating provider.
- Treatment outcome: NTEP team/PPSA-NGO needs to work very closely with the doctor to ensure that the outcome is reported and recorded in Nikshay. Preferably, a notification register should be placed at private doctors/ establishment (at least high notifying providers) with support staff of doctors maintaining it. Sensitize doctors and support staff on treatment outcome and ensure treatment outcome of all notified TB patients. Alternatively, health worker will visit TB patients, at least at the end of 6 months and then as per the duration of treatment prescribed by private practitioner to get information on completion of treatment. All efforts should be made by the public health staff to validate patient informed treatment completion status with his/her care provider. Incentives for treatment outcome reporting should be provided to private practitioners on declaring treatment outcome themselves or conforming information on treatment outcome received from patients by public health staff.
- NIKSHAY Poshan Yojana. Benefit given to TB patients in public sector should also be extended to patients in private sector including social welfare support. These benefits would empower patients to demand notifications. All patients, irrespective of their place of treatment, will be linked to applicable social support schemes (Annex I) for ensuring adherence and successful completion of treatment. Private providers should be encouraged to give information on NPY to TB patients, get bank account details. Patients should be informed that they will be contacted by staff for collection of bank account details. Patients who travel to a place different from the place of diagnosis, during the course of the treatment , should be contacted and communication should be made to the concerned TB Unit to ensure remaining benefits under NPY are delivered to such patients.

To extend public health services to the large number of TB patients in private sector, programme needs to have availability of human resource. The district may plan additional human resource (STS) according to total case load of TB units, for patients' support. This is particularly relevant in rural settings where the districts may not require full strength of PPSA for provider engagement and patient management. But, with addition of STS, patient support can be ensured. Wherever required, programme may use NGOs to expand these services.

IV Regulatory measures

Along with collaborative measures, regulatory measures are being taken to ensure complete coverage.

- Government of India has made notification of TB cases mandatory on 7th May 2012.
- This was amended in 2015 to incorporate public health actions following notification.
- TB notification regulation is strengthened with sufficient legal backing on violation of not notifying a TB patient.
- In March 2018, these provisions were published in the Gazette of India Important clauses of Public Health Action were incorporated in the Gazette includinglegal provisions of punitive measures in case provider fails to notify as per IPC 269 & IPC 270.

  Work with State Drug Controllers to strengthen H1 schedule implementation: -Use of Gazette notification of H1-schedule will help to ensure quality of treatment regimen and also help to capture information of practitioners who prescribe anti-TB medicines. This may help to identify practitioners for prioritizing or targeting to encourage TB notification from them. Expansion of scope of provisions under schedule H1 shall be considered to link dispensation of anti-TB drugs with TB notification.

Use clinical establishment act (CEA) wherever it is being implemented. This will help to identify providers who are registered under the CEA and not registered with NIKSHAY. Effective engagement with agency / nodal person within public health department to use CEA for enforcing notification of TB patients is one more way to use regulatory measures.

V- Process of engagement-

Planning based on Gap Analysis

- Planning is of paramount importance in successful implementation of partnership activities.
- Undertake assessment of gaps in health service delivery in NTEP in different districts of your state. Identify the geographical and functional gaps.
- The identified gaps would form the basis for formation of partnership and this information may be displayed on your state website and office of STOs/DTOs.
- Districts/State may propose clearly spelt partnership options based on Partnership guidelines and based on felt needs in NGO-PP heads of PIP. Districts/State may not restrict to partnership options but may propose innovative activities in line with needs, under the "innovation" budget head as well.
- Under this approach, the states have been provided greater flexibility whereby they can utilize 30% of their PPM budget for piloting new projects and innovations as per requirements of the state. The states have been given the flexibility for utilization of 10% of their PPM projects for capacity building and promotion of NGO-PP activities.
- Proposals clearly explaining intervention, roles of partners/ programmes, activities with time line, resources required for each activity and expected output, outcome have more chances of getting approvals.

Efficient Deployment of partnership options

[A] It has been experienced that lag time associated with sanction of funds and deployment of partnership activities is huge resulting in enormous delay in implementation of activities and inability of programme to achieve its objectives.

[B] In this regard, State/Districts may get proposal approved from District Health/NTEP Society and/or State health/NTEP society in line with partnership guidelines.

Guidance Document on Partnerships under NTEP (2019)

With the aim of Ending TB by 2025, 5 years ahead of the Sustainable Development Goals' targeted year-2030, India has taken on an ambitious challenge which can only be met if all TB patients in the country, from both the public and the private sectors, are detected timely, given appropriate treatment and supported in all aspects of TB care. Alongside strengthening the existing public sector structures for TB diagnosis, treatment and care, the Ministry of Health & Family Welfare (MoHFW) envisages to extend the umbrella of care through "partnership options" with agencies. A 'partnership option' refers to engaging with a private-sector partner to improve the availability and quality of service delivery for TB patients. These partnerships may be forged with both not-for-profit as well as for-profit partner agencies, from whom the govt. may 'purchase services' from 'Service Providers' from the private sector, based on a 'needs assessment' at the state and district level.

Various efforts have been invested in including the private sector in efforts to eliminate TB. In 2001, the Central TB Division (CTD) formulated the first guidelines on partnership for engagement of non-governmental organizations (NGOs) which were later revised in 2008 and 2014. The National TB Programme also engaged with medical colleges and several NGOs through grant-in-aid mechanism, but overall, in all these interventions, a large scale, sustainable engagement of 'for-profit' private health sector remained missing.

Evidence from the recent large-scale pilots, such as the Patient Provider Support Agency (PPSA) have shown how newer approaches to private sector engagement can produce high-impact results. Therefore, there has been a fundamental shift in NTEP's approach to public-private partnerships. In the Guidance Document on Partnerships (2019), there has been a move from input-based financing to an output- and results-based framework which allows for "market discovery" instead of prescriptive costs. This "performance based" approach keeps the output and results at the core of the programme.

Key features of a partnership option

1. **Quality of Care as per Standards of TB Care in India (STCI):**

   It is essential to ensure that private-sector patients have access to the same quality of diagnostics, drugs and community-based services as public-sector patients with minimum out-of-pocket expenditure. Therefore, all Service Providers should provide services aligned as per the latest guidelines on diagnosis and treatment and STCI.

2. **Needs-based:**

   For partnerships to be effective, each state or district must design partnership options based on the local needs, capacity of the public health system and availability of competent Service Providers. The accountability and responsibility of ensuring that services are provided remain with NTEP even if a partnership option is leveraged. More than one partnership option can be explored based on the needs identified.

3. **Patient-centric:**

   Patient should be at the centre of every partnership option. Sufficient linkages must be ensured in the cascade of care and no partnership option should be a standalone mechanism to address a short-term gap. "Bundling options" may be adopted to design practical and outcome oriented partnerships.

4. Competitive and performance-based approach:

Service Providers who will be able to deliver high-quality services at prices commensurate with market rates must be chosen and not simply the 'lowest cost bidder' as has traditionally been the norm. Payments must be made through "output/performance-based" mechanism.

Needs Assessment should be done before taking on partnership options. Steps involved in conducting a needs assessment exercise are:

STEP 1:	STEP 2:	STEP 3:	STEP 4:	STEP 5:
Identify gaps from key output and performance indicators, such as notification, microbiological confirmation, DST, HIV testing, treatment outcome etc. Data sources should include HMIS data.	Identify gaps in inputs, activities and processes carried out to get the desired output. These may include presumptive TB examination, referral, testing, linkages, adherence support etc.	Identify systemic gaps of inputs, such as infrastructure, human resource, logistics capacities.	Compile all identified issues in a logical order to understand which gaps. Prioritize areas that can be addressed through strengthening of the Public Health System and those that can be addressed through partnership options or through other innovations.	Findings of the Needs Assessment exercise as approved by a committee under the Principal Secretary (NHM), should be placed in the public domain (NHM website / Nikshay Portal).

A summary of the various partnership options that are available, and their scope of services is given in the below table:

PARTNERSHIP OPTION	SERVICES
Patient Provider Support Agency (PPSA)	1. Private provider empanelment and engagement 2. Linkages for specimen transportation and diagnostics 3. Patient management (public health action, counselling, adherence support) 4. Logistics of Anti-TB drugs The PPSA is an example of a "service bundle" that covers a whole range of activities for end-to-end management of private sector
Public Health Action	1. Counselling and adherence management 2. Contact tracing and chemoprophylaxis 3. HIV counselling, testing and treatment linkage 4. Drug susceptibility testing (DST) and linkage for DR-TB services 5. Blood sugar testing and linkages for diabetic care 6. Linkages for Nikshay Poshan Yojana
Specimen Management	1. Collection of sputum samples 2. Collection of respiratory (excluding sputum) and EP specimen 3. Transportation of specimen
Diagnostics	1. X-ray centres 2. Smear Microscopy (ZN/FM)/Molecular diagnostics 3. Culture (stand-alone) / Line Probe Assay / Culture and Drug Susceptibility Testing 4. Pre-treatment and follow-up investigation 5. Latent TB infection test (LTBI)
Treatment Services	1. TB management centre 2. DR-TB treatment centre (outdoor) 3. DR-TB treatment centre (indoor) 4. Specialist consultation for DR-TB patients
Drug Access and Delivery Services	1. Drug supply chain management 2. Improving access to anti-TB drugs for TB patients notified by the private sector
Active TB Case Finding and TB Prevention	1. Active TB case finding 2. TB prevention package for vulnerability mapping and LTBI management
Advocacy, Communication and Community Empowerment	1. Advocacy 2. Communication 3. Community Empowerment

The partnership options stated above are those which are currently identified and recommended. It is not an exhaustive list.

States can innovate new partnership options which suit their local context. Some examples of innovative options are hiring a Service Provider for airborne infection control, facility-risk assessment, rehabilitation of DR-TB patients, or alcohol de-addiction programmes for people with TB etc. The Guidance Document gives detailed description on each of the Partnership option mentioned above.

Implementing a partnership option

There are three main steps to implement a partnership option:

1. **Contracting a Service Provider**
2. **Budgeting for Partnership Option**
3. **Deriving a payment mechanism and developing a performance-based matrix**

These steps are briefly described below:

1. Contracting a Service Provider

While contracting a service provider, the state must decide on the type of contract that will adopted:

- Input based contracts: Should be used when the nature of the services is clear, direct and easy to define but the results or output are not easy to quantify / verify, such as for advocacy, communication and community empowerment. These contracts will be particularly useful for Service Providers who have limited means to provide services but are able to work in specific, often challenging environments.
- Fee-for-service contracts/ Purchasing of Services contract: Here, the activities, processes and results are quantifiable and are available at a specified value / fee, such as for specimen management, diagnostics, treatment centres and drug supply and delivery services. The payment is based on the number of services provided to patients and adjusted, if needed, to assure quality parameters.
- Output-based contract: Here, the desired results are well specified but means of achieving the results are not prescribed such as for PPSA, Public Health Actions, active case finding and TB prevention package. These contracts focus on the output, quality, or outcomes which are verifiable in quantity and quality. In these contracts, a part of the Service Provider's payment is linked to the achievement of the pre-set performance indicators. The Service Provider is expected to identify innovative, efficient and effective ways to achieve the outputs.

Steps for contracting:

a. Identify service(s) to be procured from the Service Provider
b. Prepare a Terms of Reference (ToR) including scope and volume of services, and quality/performance/output indicators
c. Estimate the budget
d. Prepare and issue a request for proposal
e. Organize a pre-bidding conference
f. Submission and opening of RF
g. Technical evaluation of bids
h. Financial evaluation
i. Select the proposal
j. Letter of acceptance and signing the agreement

2. Budgeting for Partnership Option

The 2019 guidance document moves away from the traditional approach of prescribing pre-defined costs for each service and recommends that costs remain dynamic. The primary factors that influence cost of services are volume, geography (urban, rural, tribal etc.), local market dynamics, cost of living, demand of the service, inflation, local epidemiology, ease of delivering services, importance of service, risk involved, and delay in payment. Most Service Providers will have to invest costs up-front and in the initial phase to start field operations. Local factors, such as delay in payment, risk of non-achievement should be factored into the cost. Any additional costs that will affect or improve the outputs also needs to be factored in for example, awareness generation activities, capacity building and establishing feedback systems.

Costing can be done at the state or district using one or more approaches described below:

i. **Market scan:**

   Data must be compiled on the market price of a particular service by various Service Providers in the region. This information is used to arrive at mean/median/mode of prices so as to derive the unit cost.

ii. **Activity-based costing (ABC)**

   This approach can be used for costing partnership options which have a wide set of services and a large number of activities within them, such as PPSA. While using this approach, all the activities are included to arrive at an estimate. All the resources, such as personnel, equipment, reagents and material, transport, communication, establishment cost etc. required for each of the activity have to be identified and quantified. The unit cost of each resource is estimated based on multiple components, such as local context, stakeholder consultations, market price etc.

iii. **Use of Prevailing unit price as used in other government programs/similar settings**

   In a scenario where similar services are not available in the market and if ABC is also not possible, the rates prescribed under the Partnership Guidelines 2014 or rates prescribed under any other government scheme may be considered as reference unit price. In such situations, the inflation factor should be applied to estimate the cost of a specific service for the year of procurement.

3. Deriving a payment mechanism and developing a performance-based matrix

A well-defined payment mechanism is critical for the implementation of partnership options to succeed. The payment mechanism should clearly mention the frequency, clearly defined deliverables, the documents which are to be submitted along with invoice / payment request and mode of payment. Preferred mode of payment should be electronic and should follow the state norms of National Health Mission.

Payments are linked to specific outputs, which should be measurable and verifiable. For each partnership option, one key output should be identified and the unit cost will be invited against this key output. Key outputs linked will be used to calculate the payment. Performance in associated activities will be monitored to honour or withhold a particular percentage of unit cost for these associated activities. If a particular associated activity could not be performed within the prescribed time, then the assigned percentage of unit cost for that particular service gets forfeited and is not paid to the Service Provider. The percentage of unit cost to specific activity / benchmark is decided based on its importance in the geography and level of effort required to perform the activity.

State/District should conduct a field verification and validation for these indicators/key output periodically among a sample of at least 5% service users. Verification and validation can be done using record review (e.g. valid test results of NAAT), contacting the patients (e.g. notification of TB patient, result of HIV testing, successful treatment outcome), verifications from healthcare service provider - a combination or any other method which might be useful in the context of the partnership option.

A system of periodic reporting, review, supportive supervision and ongoing monitoring will be instituted to track contract performance. A set of indicators must be decided during the design of the partnership option. A detailed report of activities must be submitted every month in the format prescribed. The state/district will give suggestions and guidance after reviewing the report. NTEP may conduct review meetings at the state and district level on a monthly/ quarterly basis, and may also commission external evaluations as per requirements.

To ensure success of the partnership options, it is key that the state has sufficient capacity in technical areas such as contract deployment and management, capacity building, monitoring and payments processing on completion of services. An institutional mechanism such as a Technical Support Unit (TSU) at the state level may be considered as a framework to take on these tasks especially like large scale- contract management. The TSUs will support the State TB Cell to manage the complete cycle of engaging Service Providers, undertake monitoring and evaluation, and capacity building and technical assistance activities.

There is also a need to enhance the technical and managerial capacity of Programme Manager and Service Providers to implement these partnership options. The first step is to assess the capacity and competencies of these two key stakeholders to initiate, manage and implement the new partnership options at the national, state and district levels. An agency with relevant experience and expertise can be contracted to assess existing capacity, prepare a detailed capacity-building plan with a timeline and budget. The agency shall identify partner institutions (e.g. TISS / IIHMR/NIFM etc.) to develop a curriculum addressing the gaps identified in the needs assessment for relevant government stakeholders. The agency will recruit these resource persons to conduct various training at state/district level.

The Programme will impart an in-depth training on the Guidance Document on Partnerships (2019) for all participants following this modular training.

Involvement of Medical colleges in NTEP

To widen access and improve the quality of TB services, involvement of medical colleges and their hospitals is of paramount importance. Medical colleges play an important role in supporting any health programme in India. Medical college faculty have an important role in TB control as opinion leaders and trendsetters, teachers imparting knowledge, skills, as partners in sustaining the programme by teaching and practicing standard practices in TB care, and as role models for practicing physicians. Recognizing the significant role medical colleges can play, the NTEP envisaged activities pertaining to training and teaching, service delivery, advocacy and operational research as priority areas for collaboration with the medical colleges.

Structure of Task Force Mechanism

The medical colleges in India have been involved under NTEP in a structured task force mechanism of National, Zonal and State level task forces in addition to the medical college core committee. The main role of the NTF is to guide, provide leadership and advocacy for the NTEP, recommend policy suggestion regarding medical colleges' involvement in the NTEP, coordinate

with the Central TB Division, and monitor the activities of the ZTF.

Task Force Mechanism

For effective implementation of the programme in medical colleges, the programme functions through a Task Force mechanism at the National, Zonal and State levels.

- A National Task Force (NTF) and six Zonal Task Forces (ZTF) have been formed for their effective involvement in NTEP. Within each zone, nominated medical colleges have been given the responsibility to function as nodal centres. All states which have medical colleges have formed State Task Forces (STF).
- ZTF facilitates the establishment & functioning of State Task Forces (STF), coordinates between the national and STF, as well as between medical colleges and the State/District TB Centres, and monitors the activities of STF.
- STF facilitates establishment of various NTEP facilities like Microscopy Centre/CBNAAT lab, Treatment centre, Drug resistant TB centre etc in Medical Colleges. It also facilitates implementation of other activities like research pertaining to TB in Medical colleges.
- Core Committees, at the level of medical colleges facilitate inter-departmental coordination for programme implementation. In each medical college, there should be a core committee to arrange for training and overseeing the functioning of the microscopy / treatment centre in their respective institutions.
- Medical colleges are supported with Medical officer, Lab technician & TB Health visitor to facilitate implementation of NTEP activities
- Frequency of meetings

Core committee meetings are held on a quarterly basis by the chairperson of the committee to monitor the activities of their own college under NTEP

STF Meetings are held once in three months. Purpose of STF meeting is to review the activities and disseminatethe updates under NTEP to all medical colleges.

NTF is conducted on an annual basis to review the performance of medical colleges with the support of CTD

Similarly, Operational Research committees are formed at national, zonal & state level which coordinate with Task forces and the state & district officer for approval of submitted OR proposals representing the medical colleges.

Operational research is one of the important activities of Medical Colleges. NTEP has a provision of sanctioning Operational Research grant up to Rs 2 lakh at State level and up to Rs 5 Lakh at Zonal level and proposals beyond Rs 5 lakh are processed at National OR Committee level. State OR Committee is authorized to sanction Rs 30,000 blanket to deserving post graduate/super specialty/ fellow ship candidate for undertaking dissertation/Thesis.

State Operational Research Committee is formed by State Task Force members during State Task Force meeting either by consensus or by election. Chairperson of STF OR Committee may be senior faculty of Medical college from any of the relevant departments who is expert in the field of TB & Research. State TB officer is member secretary of State OR Committee. Members of STF OR Committee are 5-7 in Numbers and represent various specialties. Members are senior faculties from Medical college who are expert in their respective fields and research arena. STF

OR committee is to be reconstituted every 3 years mandatorily.

Zonal Operational Research Committee is formed by Zonal Task Force during their annual meeting. Chairperson of ZTF OR Committee may be senior faculty of Medical college from any of the States who is expert in the field of TB & Research. State TB officer of the state from where is member secretary of Zonal OR Committee. Members of ZTF OR Committee are 5-7 in number and represent various specialties. Members are few of the STF Chair who are expert in their respective field and research arena. ZTF OR committee is to be reconstituted every 3 years mandatorily.

National Operational Research Committee is formed by National Task Force during their annual meeting. Chairperson of NTF OR Committee may be senior faculty of Medical college from any of the States who is expert in the field of TB & Research. DDG TB CTD GOI is member secretary of National OR Committee. Members of National OR Committee are 5-7 in number and represent various specialties. Members are few of the STF Chair who are expert in their respective field and research arena. NTF OR committee is to be reconstituted every 3 years mandatorily.

- Appropriate specialists/Researchers from Public Health Department, Partners etc., may be co-opted by Chairpersons in consultation with programme officers at National/Zonal/State level

STO/DTO should undertake the following activities for involvement of medical college hospitals in the NTEP

5. Involvement of all Medical college hospitals in NTEP. Formation of Core committee regular meetings for discussing the issues of coordination, training, referral and transfer mechanisms
6. Consultation with the Medical Colleges in conducting sensitization workshops on NTEP for faculty members where the same has not been done.
7. Organization of NTEP training of Medical officers, Laboratory Technician and Treatment Supporters and other staff as required.
8. Provision of Binocular Microscopes wherever required and upgradation of laboratory for the Microscopy centres. Laboratory consumables, forms and registers required should be provided by the State/District TB Cell.
9. Provision of 100% requirement of NTEP drugs.
10. Ensure supervision of the laboratory and treatment services and assist in patient retrieval wherever necessary.
11. Provide technical inputs, guidance and supervision as per programme guidelines
12. Additional contractual staff are provided wherever required to implement and coordinate the activities of NTEP in Medical Colleges/Hospitals as per provisions under the programme as per norms of costing 2019-2020.In addition to the above, co-ordinate with Deans/Directors of the Medical College hospitals so that they:
13. Provide space for a Microscopy Centre, Treatment centre and DDR TBC in the hospital.
14. Identify one senior faculty member, preferably from the Dept. of TB & Chest or from Medicine as a nodal person for NTEP activities.
15. Designate one Laboratory Technician for DMC and one health worker as Treatment Supporter. It should be ensured that the designated staff especially the LT has sufficient time for NTEP work.

- Issue directions to the major OPDs of the college/hospital to refer all patients with cough

of 2 weeks or more to the DMC of the hospital.

- Ensure availability of faculty members for sensitization regarding the NTEP and for training of key staff like the MO in charge of the DMC, LT and DOT providers.
- Issue instructions to all the doctors to follow NTEP diagnostic algorithm for all patients and standardized treatment policies as per the NTEP. Proper referral of patients who reside outside the district in which Medical College is situated should be undertaken with the help of the staff in the hospital DMC.
- Stop procurement of anti-TB drugs except for those patients who are critically ill and require in-door and specialized treatment. NTEP drugs should be used for majority of TB patients.
- Agree to supervision by NTEP staff and submit reports as required under the NTEP.

Inter-Ministerial Engagement

TB is not only a disease but a social problem. TB adversely affects the poor and marginalized population in the spheres of poverty, employment, nutrition, housing, working conditions etc. Such multi-faceted issues are often beyond the domain of health and call for comprehensive solutions. Despite concerted efforts, Tuberculosis causes more deaths than any other infectious disease worldwide and is one of the leading killers among people of working age with potential catastrophic social and economic consequences for families, communities, and countries at large.

Multi-Sectoral Engagement can mainstream TB patients by innovative approaches and through their existing programs/schemes. Such engagement can contribute towards ending TB in India by raising awareness about TB and promoting TB prevention measures, providing TB patients with quality care and socio-economic support. Multi-Sectoral Collaboration to take convergent action and to reach key populations served by various Ministries/PSUs and Partners such as workers, miners, migrants, slum dwellers, tribal population, women and children etc. is a key strategy.

Objectives of Collaboration

1. Expansion of services of TB outside public health facilities.
2. Reaching out to the larger population with information on prevention and TB care related services.
3. Build capacity of functionaries in all departments to address TB preventions and care activities in Schemes of their respective departments.
4. Ensure patient support through social assistance benefits to TB patients and affected family through existing Schemes.
5. Effective scale up of non-medical interventions by leveraging linkages, outreach, technology, financial inclusion to strengthen services for TB elimination.

Different Ministries targeted for efforts for TB elimination by 2025

- Ministry of Labour and Employment
- Ministry of Railways
- Ministry of Home Affairs
- Ministry of Defence
- Ministry of AYUSH

- Ministry of Tribal Affairs
- PSUs under the Ministries with Health Facilities
- Ministry of Consumer Affairs, Food & Public Distribution
- Ministry of Women and Child Development
- Ministry of Housing and Urban Affairs
- Ministry of Rural Development
- Ministry of Social Justice and Empowerment
- Ministry of Skill Development and Entrepreneurship
- Ministry of Micro, Small and Medium Enterprises
- Ministry of Road Transport & Highways
- Ministry of Development of North Eastern Region
- Ministry of Coal
- Ministry of Textiles
- Ministry of Steel
- Ministry of Power
- Ministry of Heavy Industries and Public Enterprises
- Ministry of Petroleum & Natural Gas
- Ministry of Human Resource Development
- Ministry of Youth Affairs and Sports
- Ministry of Information and Broadcasting
- Ministry of Electronics and Information Technology
- Ministry of Panchayati Raj

Process of collaboration with different Ministries

- Inter-ministerial consultation on TB
- Collaboration with Ministries/Departments
- Formalizing partnership through MoU/ LOI/ LOA signing
- Constituting Joint working group for activities implementation
- Regular follow up and meetings

Scope of Collaboration

1. Integration of TB care services in health facilities under various ministries/PSEs
2. Socio-economic support & Empowerment
3. Promoting TB infection Prevention measures
4. Raising awareness about TB
5. TB prevention and care at work places
6. Corporate Social Responsibility (CSR)

1. TB care services in health infrastructure

Provide TB diagnostic and treatment services as per national protocols and guidelines in all health facilities in health facilities under the Ministries / PSEs.

- Training of health staff / AYUSH providers / Traditional Healers
- Establish system of notification of TB patients

- Extend patient support services including NIKSHAY Poshan Yojana benefits
- Incorporate TB Screening in Health facilities and Health Camps
- Linkages for free diagnostic and treatment services to TB patients
- Supply chain system to be established for free anti-TB drugs
- Establish DMC and specimen transpiration

2. Socio-economic support & empowerment

- Link and prioritize TB patients in livelihood opportunities and vocational training
- Prioritize / include TB patients in social assistance programme
- Sensitize Self-help Groups (SHGs) and engage them for TB care and prevention measures
- Nutrition support linkages
- Travel support
- Provision of disability benefits
- Prioritization of TB patients in housing

3. Infection Prevention

- Infection Prevention Measures in work place settings
- Mass awareness on infection prevention at public transport
- Training of staff on infection prevention and cough hygiene
- Adequate ventilation at all settings
- Decongestion measures
- Enabling environment for practicing preventive measures – availability of spittoons, tissues, adequate disposal measures

4. Awareness Generation & Communication (ACSM)

- Information on TB prevention and care
- Raise awareness on services and benefits available through NTEP on TB
- Stigma reduction and non-discrimination
- Capacity building of community
- Large scale and sustained IEC campaign on TB

5. TB Prevention and Care at Work Place

- To promote awareness on TB prevention, screening and treatment across workplace in India.
- To advocate for and facilitate an environment that minimizes and prevents TB transmission at workplaces across India.
- To support and ensure early and free diagnosis of TB across workplaces in India.
- To facilitate and ensure access to free TB drugs and adherence for the entire workforce across India.
- To ensure care and support services for the workforce, post the completion of treatment.
- To advocate and facilitate an "enabling workspace", stigma free environment for accessing TB associated services at the workplace in India

6. Corporate Social Responsibility Support for TB

TB specific initiatives/projects through CSR activities of the PSUs

- Large Scale awareness through mass/social/mid-media
- Case finding drives in priority population through health camp
- Support to expand rapid and newer diagnostics
- Mobile TB diagnostic van
- Support for linkages to diagnosis/treatment
- Technology support
- Adoption of village/ward for TB free Initiatives
- Nutrition Support to TB patients
- Livelihood support

Some Recent Examples of Collaboration

1. Department of Post
   - Expansion of TB Sample Transport Network through Postal services
   - Specimen Transportation from peripheral health facility to TB diagnostic laboratory.
   - Expand drug susceptibility testing services
   - India Post Payments Bank (IPPB) services for disbursement of NPY benefits.
2. Department of Financial Services
   - Financial assistance for nutrition support provided to each TB patients for entire duration of treatment
3. Department of Home
   - HIV and TB Interventions in Prisons and Other Closed Settings
4. Ministry of Panchayati Raj
   - Involvement in the Gram Panchayat Development Plans (GPDP) in special gram sabhas to include strategies for TB free Panchayat/Village
5. Ministry of Railways
6. Department of Ex-Servicemen Welfare, Ministry of Defense
7. Ministry of AYUSH
   - With the above three Ministeries, MoU has been signed and Action plan developed and agreed. Master list of NTEP facilities shared with MoR and mapping of health facilities of railways under process at the level of Ministry of Railways. The creation of PHI login ID in NIKSHAY is under process at State level, guidelines circulated.
   - Possibility of signing MoU with other line Ministries is being explored by the Central TB division.

Partnership with Development Partner

Developmental Partners, through their innovative interventions help in solving complex problems. The programme managers should expand some of the partners implementing projects for private sector engagement. Collaboration with all agencies to maximize the impact is important.

MODULE 8

PROGRAMME SUPERVISION, MONITORING & EVALUATION INTRODUCTION:

NTEP 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, that the data recorded and reported is accurate and valid; to 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 transparency and accountability.

Section A- Programme Supervision:

Supervision is a systematic process which increases the 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

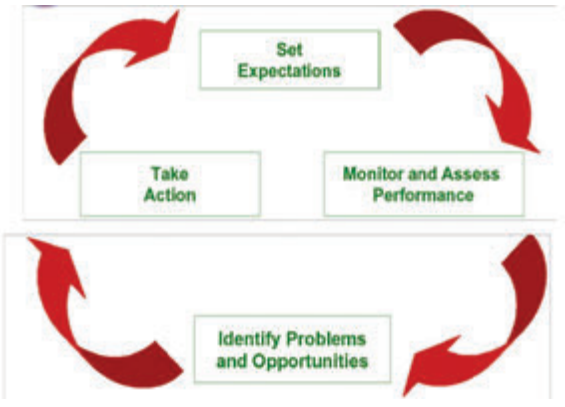
exercise but a collaborative effort to identify problems and find solutions. It must also be realized that health personnel at all levels need ongoing support for solving problems and to overcome difficulties. They also need constructive feedback on their performance and continuous encouragement in their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

National TB Elimination Programme has escalated its response to TB epidemic effectively through 'National Strategic Plan 2017-2025'. Programme intends to achieve targets of Sustainable Development goal by 2025, five years ahead of global targets. It has undertaken numerous newer initiatives in recent times. Implementation of Daily regimen for the treatment of drug sensitive TB, Universal Drug resistance testing for all TB patients, Use of Information Communication Technology for monitoring of treatment adherence etc are some of the initiatives being implemented under programme.

It is recognized that implementation and management of TB control program is challenging both from technical as well as operational point of view. It has relatively complex diagnostics, treatment, and follow up dimensions. Further it faces dual challenge of keeping pace with the widening priorities and strengthening systems for provision of basic services. Although NTEP has standardized set of program management guidelines, people tend to deviate from these over times especially, when supervision is lacking. Another concern is complacency setting in and program activities becoming "routine". This demands intensive supervision and monitoring on a continuous basis. NTEP has a robust Case based web-based recording & Reporting system (Nikshay) in place along with multiple internal/external checks to ensure good quality data generation which forms the basis for existing NTEP supervision and monitoring strategy. However, in view of the expansion in program activities this strategy needs to be more comprehensive.

Objectives of supervision:

- To ensure implementation of programme as per guidelines.
- To build capacity of the health staff to implement the program procedures correctly.
- To increase the involvement and commitment of staff at different levels from General Health System.
- To provide timely and actionable feedback.
- To assess HR and training needs.
- To ensure logistic management as per guidelines.
- To ensure accurate and valid data recording in Nikshay.



Process of Supervision:

Guiding Principles for supportive supervision:

- Focus on processes and systems
- Nurture effective communication with staff
- Resolve conflicts
- Involvement and ownership-of supervisor and those supervised.
- Efficiency and delivery should be target oriented
- Continuous learning, development, and capacity building of those supervised

Preparation for Supervision:

Pre-requisites for effective Supervision:

- Plan ahead: Advance Tour Planning (ATP) -Follow protocol.
- Inform about your visit – Through Mail, Letter, Phone call (as per norm).
- Acquaint yourself with baseline data of area/facility to be visited - Use job aides, checklists & monitoring indicators.
- Analyze data beforehand assess situation so that preparatory activities for possible interventions may be undertaken.
- Set example – Demonstrate correct practices

Supervisory tools

Planning for Supervisory visit

- Selection of area/ facility.
- Prior communication to the State/ District/ Block Programme managers as well as concerned Supervisory Staff (Both NTEP and GHS staff)
- Introductory meeting with in charge of State/ District/ Block/ Institute/ Facility
- Meeting with NTEP/ General Health System Staff apprising them the details of the supervisory visit.
- Visits as per protocol.
- Documenting important/ key observations in the NTEP Supervisory register with possible recommendations/ suggestions/ solutions.
- Preparation of Report.
- Debriefing with In charge & Staff & Sharing of report
- Action taken report from the district/ health facility

Guidelines for Selection of area/ health facility for Supervision:

The District/ area/ health facility may be selected by any one of the following criteria.

- Low performance/ extreme deviation/ high proportion of unfavourable outcomes in the Programme indicators.
- Decline in their performance when compared with the previous years i.e areas with declining trend.
- Areas with high burden of disease/ clustering of cases.
- Areas with issues related to HR, Infrastructure, patient related services

Key Performance indicators to be considered are Presumptive TB Examination rate, TB case notification rate, % of estimated Target notification achieved, % of TB notified patients with known HIV status, % of TB HIV Coinfected among tested, % of TB notified patients offered UDST, % of MDR TB diagnosed among tested, % of MDR TB offered SL-LPA, % of Drug Sensitive TB offered FL-LPA, Treatment success rate, Death rate, % Loss to follow up, % of TB notified patients who have been given benefit under Nikshay Poshan Yojana, % of expenditure out of the ROP amount, % of TB notified patients with contact tracing done, % of children < 6 years given Isoniazid chemoprophylaxis, % of eligible PLHIV given TB preventive therapy with Isoniazid etc.

Modalities of Supervision

The recommended modalities for supervision by different categories of staff are presented in the table below:

Supervisor	Methodology	Supervisor
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	• Conduct supervisory visit at least 2-3 days a week • Visit all TUs every month and all DMCs every quarter. • Visit all CHCs and Block PHCs in the district every quarter • Visit at least three patients at their homes per visit • Visit identified private/NGO and other sector health care centers.
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 CHCs/BPHCs/ PHCs and a proportion of treatment observation centres at least once every quarter. • Conduct supervisory visits 4-5days a month. • Visit at least three patients at their homes per visit. • Visit identified private/NGO and other sector health care centres.
MO-TC	• Interview MPHS and MPWs at the PHC sub-centre. • Inspect records, Tuberculosis Treatment Cards and Tuberculosis Laboratory 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 patients at their home within one month of treatment initiation. • Conduct supervisory visits at least 5 days a week. • Visit identified 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 in the jurisdiction of all the assigned TUs at least once a month. • Visit all sputum collection centres at least once a month.

Documenting Supervisory visit:

- Supervision register: Team may document observations of the visit in Supervisory register maintained at PHI level in order to ensure continuity in supervisory efforts (in Duplicate). One copy may be retained at PHI and one copy may be kept along with team for reference.
- Record important observations of the visit
- Communicate the observations to staff and appropriate authorities
- Keep track of actions taken on the recommendation
- Action taken may be sought within 1 month till district level and 2 months for state and central level supervisory visits.

Supervisory tools:

- Team may use standardized checklists during supervision and report and copies of checklist may be shared with appropriate authorities within one week of completion of supervisory visit.
- The Standard supervisory checklist is given in the Annexure.

Supervisory Checklist:

TB Unit/ DMC/ PHI - Health Facility Checklist:

	Name of the TB Unit/ DMC/ PHI	**Date of**
1.	Interact with the Medical Officer to know their involvement in TB case detection. Look at the OPD register to know what % of adult OPD are being referred for sputum microscopy.	%
2.	% of Medical Officers trained in NTEP on the management of TB cases. (Assess their knowledge on NTEP, CBNAAT/ TruNAAT services, Newer DRTB drug regimen, Nikshay Poshan Yojana etc)	%
3.	% of Medical Officers trained in NTEP on the management of TB cases. (Assess their knowledge on NTEP, CBNAAT/ TruNAAT services, Newer DRTB drug regimen, Nikshay Poshan Yojana etc)	Y/N
4.	IEC/ ACSM activities undertaken by the Medical Officer? (Enquire about the ACSM activities like School health programs, Village health sanitation & nutrition meetings, community orientation meetings, etc undertaken and observe for visible IEC wall paper/ Banners etc in the PHI and its vicinity)	Adequate/ Not adequate

DMC		
5.	Are the sputum samples being tested as soon as they are received? (Observe for the presence of LT availability on all days, availability of BM/ FM microscope, average time taken from the time of sample receipt to smear result reported (Lab turnaround time)	Y/N
6.	Is the LT trained in performing smear microscopy? (Assess his knowledge on the smear microscopy procedure)	Y/N
7.	Lab turnaround time - Average time taken from the time of sample receipt to smear result reported	(in days)
8.	Are the chest symptomatic offered chest x-ray? (either directly or linked with a x-ray centre - % of chest symptomatic offered)	Y/N
9.	Are there provision for collection and transport of the samples of key population/TB notified patients to the CBNAAT/ TruNAAT lab available? (Review the transport mechanism available)	Y/N
10.	Are the presumptive TB patients offered HIV testing? (% offered HIV testing – Check in the Lab register)	Y/N
11.	Are there adequate supplies of reagents, slides and other consumables for the next one-month? (Check for the reagents availability, quantity, labelling of expiry date)	Y/N
12.	Does the DMC have continuous water and electricity supply	Y/N
Treatment services		
13.	Are all diagnosed patients notified in the TB notification register? (Cross check the Lab register with the TB notification register and look for Nikshay id)	Y/N
14.	Are all notified patients initiated on treatment? (Including those referred/ transferred out)	Y/N
15.	Average time taken for treatment initiation from the time of diagnosis? (Calculate for recent 30 patients including those transferred/ referred out)	(in days)
16.	Are the TB notified patients offered HIV testing? (% offered HIV testing – Check in the TB notification register/ Nikshay)	Y/N
17.	Are the TB notified patients offered DM testing? (% offered DM testing – Check in the TB notification register/ Nikshay)	Y/N
18.	Are the TB notified patients screened for Tobacco usage? (% screened for tobacco usage – Check in the TB notification register/ Nikshay)	Y/N
19.	Nikshay Poshan Yojana - % of TB notified patients who has been offered Nikshay Poshan Yojana (Patients currently in the PHI for the last 1 year may be taken)	%

Treatment Supporter		
20.	Does the treatment supporter require training/ sensitization? (Assess the knowledge in DOTS, treatment card maintenance, patient services, Nikshay Poshan Yojana)	Y/N
21.	Is the treatment supporter monitoring daily drug intake by the patient (either directly/ digital adherence)? (Check the treatment card – cross match with drugs issued and pills taken)	Y/N
22.	% of honorarium received? (Ask whether the treatment supporter has received the honorarium for all eligible patients who has completed their treatment)	%
Field Supervisor (STS/ TBHV/ GHS staff)		
23.	Is individual vehicle available for field visits?	Y/N
24.	% of TB notified patients currently on treatment in whom home visits has been undertaken? (Cross check with the treatment card/ Lat long coordinates captured in Nikshay/ patient interaction)	%
25.	% of TB notified patients currently on treatment linked to a treatment supporter?	%
26.	% of children identified in whom chemoprophylaxis with Isoniazid has been given?	%
27.	Has the staff received the salary & POL till date? If No, issues there in	Y/N
28.	% of private notified patients in whom public health action has been provided?	%
29.	Senior TB Lab Supervisory (STLS)/ GHS	
30.	Is the STLS reviewing slides preserved by the LT during the on site evaluation?	Y/N
31.	Are the reports of TU-OSE done by STLS available in the DMC (Check for the copy of at least for last month)?	Y/N
32.	Is corrective action as suggested in TU-OSE report being carried out by the DMC? (current status may be used as an assessment about the corrective actions taken)	Y/N
33.	Assess 2 slides to check if they match with the OSE report?	Matches/ Does Not match

Drug Store		
34.	Is the stock register maintained as per guidelines?	Y/N
35.	Are the drug stocks adequate as per the suggested norms?	Adequate/ inadequate
36.	Are the stocks matching with the Nikshay Aushadhi?	Y/N
37.	Is the bio-medical waste from the DMC disposed as per Bio-Medical Waste (management and handling) Rules 2016	
Comments and Recommendations:		
1.		
2.		
3.		
4.		
5.		

Section B- Programme Monitoring

Introduction:

In module four we have learnt about notification of cases in TB notification register / NIKSHAY and monitoring of the treatment of the patient till the declaration of the treatment outcome. In the ensuing module we will learn how to utilize the information recorded in the TB notification register/NIKSHAY for generation of periodical reports on the programme activities and learn to monitor the performance of the programme through these reports.

Monitoring: It is a systematic ongoing collection, collation, analysis and interpretation of the data with a view to detect any deviations from the expected norms followed by dissemination of feedback information for corrective actions.

Monitoring is a process of observing whether an activity or service is occurring as planned. Monitoring aims at identifying any diversion from a planned course of action and allowing timely solutions to problems. In management, the continuous oversight of the implementation of an activity seeking to ensure that input deliveries, work schedules (processes), targeted outputs, and other required actions are proceeding according to plan.

Objectives of monitoring:

- To ensure that activities are implemented as planned, and that the data recorded and reported is accurate and valid.
- Incorporate a system of analysis, supervision and review which leads to remedial action to improve performance and improve indicators.
- Serve as a tool to facilitate following:
  - Commitment of higher authorities at different levels
  - Integration of TB supervision and monitoring with General health system both in the state and the district

- Streamline new programme activities –TB-HIV, MDR-TB, TB notification etc.
- Engagement of all care providers –PP / other government health facilities/ Medical college/NGO.
- 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.
- Understand the concept and applicability of supervision and monitoring at different levels
- Serve as ready reference for different stakeholders
- Provide a set of standardized tools for supervision and monitoring for TB services.
- Facilitate integration of RNTCP services with general health system

Monitoring of the Programme:

Monitoring is an essential component of the programme implementation. It is undertaken at different levels:

- National Level – Central TB Division
- State Level – State Health Society and State TB Cell with the support of STDC
- District Level – District Health Society and District TB Officer
- TB Unit Level – Medical Officer – TB Control
- Peripheral health institutions (Below the block/ TB unit level) – Medical Officer PHI

Cohort:

A Cohort of TB notification is a group of patients diagnosed within a specified time period in facilities of specified geographic area. Cohort based analysis allows monitoring by summarizing outcomes and other related risk factors within that group. There can be two types of cohorts.

Notification cohort based on diagnostic facility:

This cohort is prepared by grouping notified patients from all over India within a time period whose diagnostic facility belongs to the specified geographic location.

Notification cohort based on Current facility:

This cohort is prepared by grouping notified patients from all over India within a time period whose current facility belongs to the specified geographic location.

The specified quarterly cohort periods are:

Quarter	From	To
First	1st January	31st March
Second	1st April	30th June
Third	1st July	30th September
Fourth	1st October	31st December

Real time patient information in Nikshay

As discussed earlier as soon as a patient is diagnosed as a TB case, they are notified in Nikshay. Nikshay is a Case-Based-Web-Based electronic recording and reporting system which are used for real-time monitoring of TB patient on treatment services delivery. It is a powerful tool which can be used to ensure the provision of quality care by health care service providers.

Recording and updating of patient's information in Nikshay in real time mode, maintenance of accurate records and timely preparation and dispatch of validated reports is a prerequisite for successful monitoring. Different formats of records have been described in detail in relevant modules.

Source of information:

- Registers at the PHI.
- Annexure M
- CBNAAT Monthly indicator report
- PHI Monthly report.
- Summary of Monthly Programme report
- Nikshay

Programme Performance Indicators:

In order to monitor the TB services delivery to the patients, a set of monitoring indicators were developed which are as follows.

S.N	Indicator
Drug Sensitive TB	
1.	% of adult OPD referred to DMC for TB testing.
2.	Presumptive TB case examination rate (Annualized)
3.	TB Case notification rate (Annualized)
4.	% of estimated Target TB cases notified
5.	% of TB notified patients initiated on treatment
6.	% of TB notified patients offered UDST testing
7.	% of microbiological confirmed pulmonary patients offered End of IP smear examination
8.	% of microbiological confirmed pulmonary patients offered smear examination at the end of treatment
9.	% of TB-HIV coinfected patients diagnosed among tested
Paediatric & TB Comorbidities	
10.	% of paediatric TB notified among the total notified cases
11.	% of microbiological confirmed paediatric TB cases amongst the total paediatric
TB cases notified	
12.	% of TB notified patients with known HIV status
13.	% of TB-HIV coinfected patients started on ART
14.	% of TB-HIV coinfected patients started on CPT
15.	% of TB notified patients offered DM testing
16.	% of TB-DM patients started on anti-diabetic treatment

17.	% of TB notified patients screened for Tobacco usage
18.	% of tobacco users identified
19.	% of tobacco users linked with tobacco cessation clinics
PMDT	
20.	% MDR TB diagnosed out of tested
21.	% of MDR TB patients initiated on treatment
22.	% of MDR TB diagnosed offered SL-LPA
23.	% of Drug sensitive TB patients offered FL-LPA
24.	% of DRTB patients with additional resistance diagnosed
25.	% of eligible patients offered treatment regimen with newer drugs
26.	% of H-mono/ poly resistance diagnosed among those offered FL-LPA
27.	% of H-mono/ poly diagnosed patients initiated on appropriate regimen
28.	% of DRTB patients offered follow up culture at the end of IP
29.	% of DRTB patients with smear conversion out of those tested
Treatment outcome	
30.	Cure rate
31.	Success rate
32.	Death rate
33.	% Loss to follow up
34.	% with treatment regimen changed
35.	% Not evaluated
LTBI	
36.	% of children < 6 years offered Isoniazid chemoprophylaxis
37.	% of eligible PLHIV under active care offered TB preventive therapy (TPT)
Private Sector Engagement	
38.	% of private health facilities actively notifying among the total registered.
39.	% estimated Target TB patients notified
40.	% of private sector TB notified patients offered public health action (Home visits/ HIV testing/ UDST testing/ DM testing)
Direct Benefit Transfer	
41.	% of TB notified patients provided Nikshay Poshan Yojana (At least one payment for all notified patients & all payments for treatment completed patients)
42.	% of Tribal notified patients with incentives given
43.	% of private practitioners with incentives paid (calculated against the number of benefits eligible for them)
44.	% of eligible treatment supporters with honorarium paid.

The details are given in Annexure.

It is important to note that these indicators are to be analyzed for trend and regional differences and any unexpected deviations should prompt programme managers to look at the reason for the deviations and take appropriate actions.

Cohort of patients may be considered: In this report, outcome of patients registered in the quarter during 12-15 months earlier will be assessed. This facilitates the patients put on any category of treatment to complete the entire period of treatment, sufficient time for collection and collation of information and for updating the TB register. For example, patients put on regimen for CNS patients (requiring maximum duration of treatment) during the first quarter of 2018 (January – March 2018) would have completed their treatment including missed doses/Extension of CP for three months where required by the first quarter of 2019 (January-March 2019) and will become eligible for assessment of treatment outcome and reporting in the first week of the Second quarter 2019 (Refer table below).

Nikshay Data Policy:

In order to ensure uniformity of data for the purpose of Supervision, Monitoring & Evaluation across all levels, it has been decided that data from Nikshay only shall be considered as final. Moreover, to address the data entry backlog in Nikshay, it has decided to provide a fixed time period, allowing sufficient time for the user to make entry into the system and after which, the reports on Nikshay would be considered as final. The fixed period for each indicator is mentioned in table below.

Report type	Freeze period for patient diagnosed in Month X	For example, If X=Jan19	Remarks
Notification	X+2 months	01/03/2019	Min 1 month given to review and correct data
Treatment initiation of notified patients	X+2 months	01/03/2019	Min 1 month given to review and correct data
TB comorbidity testing	X+2 months	01/03/2019	Min 1 month given to review and correct data
UDST	X+2 months	01/03/2019	Min 1 month given to review and correct data
End IP Follow up (DSTB patients)	X+4 months	01/05/2019	2 months to end IP follow up + Min 1 month to review and correct data
Treatment Outcome (All DSTB patients)	X+10 months	01/11/2019	8 months of treatment duration + min 1 month to review and correct data
Treatment Outcome (DRTB Patients) (Shorter regimen/ H-mono/ poly regimen)	X+15 months	01/04/2020	Up to 11 months of treatment duration + 2 months for follow up culture report + min 1 months to review and correct data

Treatment Outcome (DRTB Patients) (All other DRTB regimens)	X+ 30 months	01/08/2021	Up to 27 months of treatment duration + 2 months for follow up culture report+ min 1 month to review and correct data
End IP/6 month Follow up (DRTB Patients)	X+10 months	01/11/2018	8 months for follow up + 1- 2 months to review and correct data

Levels of Monitoring:

- Regular and periodic monitoring of the TB services is essential at all levels of service delivery starting from the patient.
- The different levels of monitoring undertaken by the different cadres of field supervisors and programme managers are as follows:
- Treatment supporter review by field staff (STS/ TBHV/ MPW/ HI)
- EQA of DMC/ PHI by STLS.
- TB services delivery review by MO-PHI
- TB services delivery review by MO-TC
- TB services delivery review by DTO
- TB services delivery review by DHS (DM/collector & CMO)
- TB services delivery review by STO/ MD- NHM/ Principal Secretary (Health).
- Programme implementation and TB services delivery review by Chief Secretary/ Health Minister/ Chief minister.
- Programme implementation and TB services delivery review by DDG-TB/ Joint Secretary/ Additional Secretary/ Secretary/ Health Minister/ Prime minister

Protocol for Monitoring:

NTEP review protocol.

- Concept: Review in NTEP is a process through which inputs and processes in a program management unit are audited real time to identify their adequacy to achieve expected outputs and outcomes and to plan mid-course correction if necessary. Examining the inputs and processes after poor outcomes have been achieved will not contribute to mid-course correction and becomes merely an academic exercise. Reviews could be pre-scheduled and periodic or special.
- Responsible Personnel: The levels of review could be administrative, managerial and technical. Though these levels overlap significantly, administrative reviews are usually done by policy decision makers (Eg. Secretary Health, District Magistrate, District Chief Medical Officer), managerial reviews by program managers (Eg.STO, DTO) and technical reviews by technical experts (Eg.EQA Microbiologist, technical consultants).
- Timeline: Periodic reviews are usually scheduled monthly/quarterly depending on the level based on all or a set of thematic areas. Special reviews are done as per need, based on a thematic area.

- Modalities of review: Reviews could be done through physical meetings and virtual meetings with remote technological assistance.
- Expected outcome: Decisions for midcourse correction documented in the form of minutes of the meeting.

Protocol for Review meetings:

Name of the meeting	Chair	Frequency	Participants
State Level			
NTEP Program performance review of the District TB officers	Principal Secretary (Health)/ MD NHM	Monthly	Mission Director [NHM]/ Health Commissioner, Director of Health Services, Director, Medical Education, State TB Officer, STDC Director, NCD State Program Officer, State Drugs Controller, Chief Medical Officer, STF Chair, District TB Officer, Partners/ WHO Consultants
State PMDT Committee meeting	Principal Secretary (Health)/ MD NHM	Quarterly	Members of State PMDT Committee
TB comorbidity meeting	Principal Secretary (Health)/ MD NHM	Quarterly	Members of TB Comorbidity committee
TB Forum	Principal Secretary (Health)/ MD NHM	Bi Annually	Members of the TB forum
State task force	Principal Secretary (Health)/ MD NHM	Quarterly	STF Chair, STO, Principals/ Nodal Officers Medical Colleges
District level			
NTEP Review meeting of the MOTC	DM/CMO/DTO	Monthly	District program managers, MOTC, Medical College Nodal officers, DRTB nodal officers, In charge/ microbiologists CDST lab, STS, STLS, TBHV, LT, GHS staff
TB Comorbidity meeting	DM/CMO/ DTO	Monthly	District program managers, MOTC, ART centre Medical officer, Nodal officer (NCD/ NTCP)

District TB forum	DM	Bi annually	Members of the District TB Forum
Block level	NTEP performance review	MOTC/ Block Medical Officer	Block Medical Officer/ MOTC, Field staff (STS, TBHV, STLS), General Health system staff, Treatment supporters
Patient provider meetings	MOTC/ Block Medical Officer	Monthly	Block Medical Officer/ MOTC, Field staff (STS, TBHV, STLS), General Health system staff, Patients and attenders

Process:

Agenda to be prepared by STO/ DTO with approval of their immediate superior. Review checklist to be made available handy at the review table. Minutes of the meeting should be submitted to Secretary Health/ MD NHM/ STO/ DTO (as appropriate) for approval within a day and action taken should be reported within 2 weeks.Section C- Programme 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 and take appropriate measures for improvement

A team approach can succeed with a small group of carefully selected persons. Stakeholders might have varying levels of involvement in the team but must share common program perspectives, evaluation skills, and concerns. A leader must be designated to coordinate the team and maintain continuity throughout the process.

The team must be provided with the Programme profiles of the State and Districts selected for the appraisal in advance. The state must be informed sufficiently early regarding the visit by the team. At least a month's notice would allow proper planning in States and Districts. In many cases, it also provides preparation time and many activities get accomplished / corrected in the State, in lieu of the visit.

Objectives:

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

1. Central Internal Evaluation State selection and Team Members:

Central TB division selects 1 state 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 2 districts 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 can consist of representatives from CTD, NACO, WHO, National Reference Laboratories, National level NGOs like FIND/UNION/PATH/TB Alert etc, STO's from other state etc. Representatives from State Drug Controller Dept, Members from Other Programme partners etc. This list is only suggestive & inclusive of the above members but not exhaustive.

2. State Internal Evaluation District Selection and Team Members:

Up to 30 million – 2 districts per quarter; 30-100 million – 3 districts per quarter; >100 million – 3-4 districts per quarter. Aim to cover all districts at least once in 3-4 years. In States/UTs with 4 or less districts, 1 district or TU per quarter may be evaluated alternating selection between a well performing district and an underperforming district.

The SIE Team can consist of 1. State TB Officer or Deputy STO 2. STDC Director / representative (where STDC exists) 3. One DTO of a district other than the one being evaluated 4. WHO RNTCP consultants 5. Medical college representative 6. Consultant from other programme partners (IMA, CBCI etc.) 7. State Accountant and State IEC Officer 8. Representatives from State Drug Controller Dept. 9. Representatives from SACS, NPCDCS.10. TB Champions. This list is only suggestive & inclusive of the above members but not exhaustive.

3. Facilities to be visited at State level:

State TB Cell, Intermediate Reference Laboratory, STDC, SDS, NDR-TBC.

4. Facilities to be visited at District level:

DTC, DTC-TU, DTC-Stores, At least one each of the following facilities - ART Centre, Medical College, Private Hospital/ Private Physician, Private Laboratory, Chemist. One of the TUs selected must be the one selected to be a 'TB Free Block'

5. Facilities to be visited at Sub-District level:

4 TUs other than DTC in each District, 5 DMCs other than DTC DMC, 2 PHIs (like PHC, CHC etc. Other than TU facility), ICTC, DR-TBC, 1 TU from Non-Governmental sector/ Public sector other than Health Dept.

6. Patients to be visited in each District:

4 Drug sensitive cases (New), 4 Drug sensitive cases (Previously treated), 4 TB-HIV, 4 Pediatric cases, 2 patients on Shorter MDR regimen, 2 patient on H-Mono/poly regimen, 2 patients on All oral longer regimen for MDR/ RR TB (with or without additional resistance), 2 XDR patients, 4 Patients treated in the Private sector.

So, a minimum total of 26 patients must be visited in each District by the teams.

7. Selection of TB Units/ DMCs:

One TB Free Block must be selected. Other than that, District, TU, DMC selection can be made at the discretion of the team. 50% of the facilities visited must be random while 50% should be based on available Program performance data of the Districts. The teams can decide after mutual consultation on the selection process.

8. Selection of DOT Centers:

The team should visit at least 5 Treatment Support centers in each District. Selection maybe guided by, but is not limited to Treatment Support centers 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) etc.

9. Staff /Programme personnel /Officials to interact:

9.1. State level: MD-NHM/PS, Director Health Services, STO, STDC Director, MO-NDRTBC, IRL-Microbiologist, Store Pharmacist.

9.2. District level: DTO, MO-DTC, MO-PHI, All RNTCP key staff (District level and TU level), Lab Technicians at DMC, Multi-purpose Health Supervisors, ANMs, Treatment supporters.

10. Methodology of Evaluations:

- One on one interviews with programme staff and stakeholders (Key RNTCP staff, General health system staff, Private practitioners, Medical Officers, Programme Managers and Patients)
- Review of Records & Reports –Triangulation of data, validating records with online entries, analyzing actual performance against benchmarked indicators (Actual achievement vs set Targets)
- Use of Supervisory Check lists at each facility visited, for an objective assessment.
- Focus groups with health system staff/ community members to understand challenges in the newer Program services e.g. DBT to Beneficiaries.

11. Activities performed in IE:

Field Visits to DMC, DOT 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.

12. Feedback Meeting:

At the end of the Evaluation visit, all stake holders have to be debriefed about the appraisal findings and suggestions. A meeting with the Secretary Health and Director Health of the State must be fixed by the STO in advance in consultation with the CTD. The team also has to appraise the CMO and District Collector on the district level observations.

It is recommended that a State Level District TB Officers' Meeting is also held for dissemination of the Evaluation findings to all District Managers in the State.

13. Evaluation Report:

The team should ensure the following:

- Prepare a one pager with critical and important issues to be addressed by the Administrators
- Prepare a detailed report in the IE Reporting format for CTD/State. This detailed report should be sent to the State by CTD in CIE and to the Districts by the State in SIE.
- Ensure the data from the check lists is entered and compiled before leaving the District

Annexure on Indicators

S.N	Indicator	Formula	
1.	Annualized Presumptive TB Cases examination rate	Numerator:	Number of presumptive TB cases tested (smear microscopy+ CBNAAT+TruNAAT)
		Denominator:	Total population of the area
		Multiplier:	1,00,000 X (12/duration in months)
2.	Annualized TB case notification rate	Numerator:	Number of TB patients diagnosed
		Denominator:	Total population of the area
		Multiplier	1,00,000 X (12/duration in months)
3.	Proportion of TB cases notified against the target estimated	Numerator:	Number of TB patients notified/ diagnosed
		Denominator:	Target number of TB patients estimated to be notified
		Multiplier:	100
4.	Proportion of paediatric TB cases notified among total TB cases notified	Numerator:	Number of paediatric TB cases notified
		Denominator:	Total TB cases notified
		Multiplier:	100
5.	Proportion of microbiologically confirmed paediatric TB cases out of total paediatric TB cases notified	Numerator:	Number of microbiologically confirmed paediatric TB cases notified
		Denominator:	Total Paediatric TB cases notified
		Multiplier:	100
6.	Proportion of TB notified patients with known HIV status	Numerator	Number of TB notified patients with known HIV status (Positive/ Negative/ Non reactive)
		Denominator:	Total TB patients notified
		Multiplier:	100
7.	Proportion of people living with HIV/ AIDS screened using the 4 Symptom complex in HIV care/ treatment settings	Numerator	Number of persons enrolled in HIV care who were screened for TB using the 4 Symptom complex
		Denominator:	Number of persons enrolled in HIV care and seen for care during the reporting period
		Multiplier:	100

8.	Proportion of people living with HIV/ AIDS identified as a presumptive TB case using the 4- symptom complex among the persons screened	Numerator:	Number of persons enrolled in HIV care who were identified as presumptive TB case using the 4 Symptom complex
		Denominator:	Number of persons living with HIV/ AIDS screened using 4 symptom complex
		Multiplier:	100
9.	Proportion of people living with HIV/ AIDS tested for TB among those identified as a presumptive TB case using the 4 symptom complex	Numerator	Number of persons tested for TB
		Denominator	Number of persons living with HIV/
		Multiplier	100
10.	Proportion of people living with HIV/ AIDS diagnosed as active TB among those who were tested	Numerator	Number of persons living with HIV/ AIDS diagnosed as active TB
		Denominator	Number of persons living with HIV/AIDS tested for TB
		Multiplier	100
11.	Proportion of TB treatment initiation among those persons living with HIV/ AIDS diagnosed to have active TB	Numerator	Number of persons living with HIV/ AIDS diagnosed to have active TB initiated on TB treatment
		Denominator	Number of persons living with HIV/ AIDS diagnosed to have active TB
		Multiplier	100
12.	Proportion of PLHA with active TB receiving ART	Numerator	Number of persons living with HIV/ AIDS diagnosed to have active TB initiated on TB treatment Number of PLHA with active TB receiving ART
		Denominator	Number of PLHA with active TB initiated on treatment
		Multiplier	100
13.	Proportion of PLHA with active TB receiving CPT	Numerator	Number of PLHA with active TB receiving CPT
		Denominator	Number of PLHA with active TB initiated on treatment
		Multiplier	100

14.	Proportion of PLHA newly enrolled in HIV care and screened negative for TB, started on TB preventive therapy (TPT)	Numerator:	Number of PLHA newly enrolled in HIV care and screened negative for TB, started on TB preventive therapy (IPT)
		Denominator:	Number of PLHA newly enrolled in HIV care and screened negative for TB
		Multiplier:	100
15.	Proportion of PLHA newly enrolled in HIV care and screened negative for TB, started on TB preventive therapy (TPT)	Numerator:	Number of adult TB notified patients screened for DM
		Denominator:	Total adult TB notified patients
		Multiplier:	100
16.	Tobacco usage (Both smoke & smokeless form)	Numerator:	Number of adult TB notified patients screened for tobacco usage
		Denominator:	Total adult TB notified patients
		Multiplier:	100
17.	Proportion of TB notified patients with UDST tested	Numerator:	Number of TB notified of patients with UDST tested.
		Denominator:	Total TB notified patients
		Multiplier:	100
18.	Proportion of MDR TB cases initiated on treatment among diagnosed	Numerator:	Number of RR/ MDR TB notified patients initiated on DRTB regimen
		Denominator:	Total RR/ MDR TB notified patients
		Multiplier:	100
19.	Proportion of Rif resistance patients subjected to baseline SL-LPA	Numerator:	Number of Rif resistance patients (RR/MDR TB) subjected to baseline SL-LPA
		Denominator:	Total number of Rif resistance patients (RR/MDR TB) diagnosed
		Multiplier:	100
20.	Proportion of patients with results available among subjected to Base line SL-LPA	Numerator:	Number of RR/ MDR TB patients with baseline SL-LPA results reported
		Denominator:	Number of RR/ MDR TB patients subjected to base line SL-LPA
		Multiplier:	100

21.	Proportion of RR/MDR TB patients with additional resistance to SLI or FQ or both SLI & FQ diagnosed among RR/ MDR TB patients with BL-SL LPA results reported	Numerator:	Number of RR/ MDR TB patients with additional resistance diagnosed
		Denominator:	Number of RR/ MDR TB patients with base line SL-LPA results reported
		Multiplier:	100
22.	Proportion of Rifampicin sensitive TB patients subjected to FL-LPA	Numerator:	Number of Rif sensitive patients subjected to baseline FL-LPA
		Denominator:	**Total number of Rif sensitive patients diagnosed**
		Multiplier:	100
23.	Proportion of Rifampicin sensitive patients with H-mono / poly resistance report available among tested for FL-LPs	Numerator:	Number of Rifampicin sensitive patients with H-mono / poly resistance reports available
		Denominator:	Number of Rifampicin sensitive patients subjected to FL-LPA
		Multiplier:	100
24.	Proportion of H-mono / poly resistance TB cases diagnosed amongst those subjected to FL-LPA	Numerator:	Number of Rifampicin sensitive patients with H-mono / poly resistance diagnosed
		Denominator:	Number of Rifampicin sensitive patients subjected to FL-LPA with reports available
		Multiplier:	100
25.	Proportion of H-mono / poly resistance TB cases initiated on appropriate treatment regimen for H-mono / poly regimen	Numerator:	Number of H-mono / poly resistance TB patients initiated on treatment
		Denominator:	Number of H-mono / poly resistance diagnosed
		Multiplier:	100
26.	Proportion of eligible DRTB patients initiated on newer regimen (Bedaquilline / Delamanid)	Numerator:	Number of eligible DRTB patients initiated on newer regimen (Bedaquilline / Delamanid)
		Denominator:	Total eligible DRTB patients (MDR TB with additional resistance +XDR
		Multiplier:	100

27.	Average time to initiation of treatment from diagnosis	Numerator:	Summation of (difference between the date of diagnosis and date of treatment initiation)
		Denominator:	Total number of TB patients initiated on treatment
28. Active Case Finding			
29.	Proportion of target population screened for TB symptoms using the verbal questionnaire	Numerator:	Number of people screened for TB symptoms using the verbal questionnaire
		Denominator:	Key / vulnerable population mapped
		Multiplier	100
30.	Proportion of presumptive TB case identified among the target population screened	Numerator:	Number of presumptive TB case identified during the ACF
		Denominator:	Number of people screened for TB symptoms
		Multiplier	100
31.	Proportion of presumptive TB case (sample) referred for testing among identified	Numerator:	Number of presumptive TB case tested
		Denominator:	Number of presumptive Tb case referred
		Multiplier	100
32.	Proportion of presumptive TB cases tested among referred	Numerator:	Number of presumptive TB case tested
		Denominator:	Number of presumptive TB case referred for testing
		Multiplier	100
33.	Proportion of TB cases diagnosed among those tested (includes both microbiologically & clinically diagnosed)	Numerator:	Number of TB cases diagnosed
		Denominator:	Number of presumptive TB cases tested
		Multiplier	100
34.	Proportion of TB diagnosed cases initiated on treatment	Numerator:	Number of TB diagnosed cases initiated on treatment
		Denominator:	Number of TB cases diagnosed
		Multiplier	100

35.	Proportion of TB patients with average adherence > 80%. - Under DOT with ICT based adherence monitoring Under DOT with manual adherence monitoring only	Numerator:	Number of TB notified patients on treatment with average adherence >80%
		Denominator:	Total number of TB patients on treatment
		Multiplier	100
36.	Percentage of Eligible beneficiaries with PFMS validated bank account	Numerator:	Number of eligible beneficiaries with PFMS validated bank account details available
		Denominator:	Total TB notified patients
		Multiplier	100
37.	Percentage of DBT benefits paid out of eligible	Numerator:	Number of benefits paid
		Denominator:	Total Number of eligible benefits
		Multiplier	100
38.	Percentage disbursal of DBT	Numerator:	Total amount in paid / disbursed in benefits
		Denominator:	Total amount in all eligible benefits
		Multiplier	100
39.	Proportion of TB patients declared treatment outcome (Cured/ Successfully treated/ Died/ Failure/ Loss to follow up/ Regimen changed)	Numerator:	Number of TB patients declared treatment outcome
		Denominator:	Total number of patients notified in the period
		Multiplier	100

MODULE 9

MANAGERIAL SKILLS FOR TB PROGRAM MANAGERS

Learning Objectives

In this section, the participants will learn about the following:

I. Overview of the discipline of Management
II. Hard skills for management
III. Human Resource Management
IV. Key Management Challenges
V. Managerial Styles of effective TB Program Managers
VI. Key Tasks of TB Program Managers
VII. Key Skills of Program Managers
VIII. Communication
IX. Team building
X. Building partnerships
XI. Managing performance
XII. Conclusion

Hard skills for Management

Administrative skills: Generic administrative guidelines will be given to each participant. It is expected that each officer who is working with RNTCP is trained in the administration prior to his induction in to RNTCP. Also, each state will have its specific administrative norms and rules and as such an elaborate training cannot be imparted in this training.

Financial skills

- Revised Financial norms
  - NTEP
  - GFR rules
  - NHM
- Procurement guidelines
- Analyzing Expenditure with approved PIP
- Computer skills
  - Mail and other communication channels
  - Using the computers
  - Word
  - Power point t
  - XL
  - Nikshay for
  - Data entry
  - Data extraction
  - Presentation and training
- Data management skills
  - Arranging as per priority
  - Analyzing and Interpreting with the help of basic Biostatistics
  - Presenting
  - Deciding and prioritizing

Use of Management in National Tuberculosis Elimination Program

Tuberculosis continues to be a major public health challenge for India, complicated further by the emergence of multi-drug resistant TB and TB- HIV co-infections. It has therefore, become critical, more than before to ensure the provision of quality services through well managed national TB control program to meet these challenges.

It is in order to meet a felt need to enhance the management and leadership skills within the National TB Control Programs that a module specifically addressing these issues has been developed within the RNTCP Modular training package for program managers.

The successful control of TB will largely depend upon the strength of TB control activities at all levels. Strong management of healthcare facility and hospital staff is imperative for the implementation and adequate TB control activities.

From a public health perspective, poorly supervised or incomplete treatment of TB is worse than no treatment at all. The problem however cannot be attributed to just lack of an effective treatment, but to a lack of systematic and structured management mechanisms to address all components of the program.

As a program grows, it's important to ensure that anyone in a managerial position, particularly those at line/program manager level, have a good understanding of the application of management principles of which HRD is a core component.

What is meant by Human Resource Development?

Human Resource Development (HRD) is set of systematic and planned activities designed by an organization /program to provide its members with the skills and competencies to meet current and future job demands

Human resource development is a part of Human Resource Management and it deals with the all-round development of an employee within an organized framework from the time they join an organization to the time they leave.

Why are HRD activities important for TB program managers

- Increase productivity and quality outcomes of staff
- Reduce learning time to reach performance and proficiency levels
- Reduce performance deficiencies
- Enhance employee commitment
- Promote professional development

The focus of all aspects of Human Resource Development is on developing the most superior workforce so that the program can accomplish its goals of universal access to TB care. In the module, health workforce/human resources development is used interchangeably. HRD in this context refers to the process of planning, managing, and supporting the health workforce for comprehensive TB control within overall health workforce development.

What should be the vision when we plan for Human Resource Development in our area?

Vision

To achieve the ultimate goal of Revised National TB Control Program which is to ensure universal access to TB care services through sufficient, competent, committed and motivated human resource and by involving all stake holders to end TB.

What should be the ultimate goal we would like to achieve when we strategize our efforts towards effective management of human resource in our area?

Goal

To support human resources development for Revised National TB Control Program with a view to develop a health workforce which is responsive and sensitive to health needs of the population.

HRD and Universal Access

In order to strive towards universal access to TB care, it is imperative that Program Managers take a proactive role for developing and supporting strategic approaches for competence development of the staff and creating an enabling environment for all the staff involved in NTEP; as well as coordinating their efforts with overall health workforce development.

Evidence is now available to demonstrate that the number and quality of workers are positively associated with positive outcomes.

Health workers save lives[a]

[a]Source: *The world health report 2006 – working together for health*. Geneva, World Health Organization, 2006

Health interventions cannot be carried out without health workers. Developing a competent, motivated and supported human resource is therefore essential for overcoming obstacles to achieving national and global health goals. Therefore, it is the responsibility of every program manager to take a challenging and analytical perspective on how people are managed in the program.

Revised National TB Control Program envisages a paradigm shift in the role of program officers at the district and state level from a purely clinical role to managerial role.

Following the widespread implementation of DOTS by national TB control programs in several countries, it became increasingly clear that the major obstacles to TB control programs were no longer only technical in nature. The running of a large national TB control Program required increasingly better management, communication and leadership skills on the part of the TB program managers at National and intermediate levels of the program.

Discipline of Management

Management in all organizational/program activities is the act of getting people together to accomplish desired goals and objectives using available resources efficiently and effectively. Management comprises planning, organizing, staffing, leading or directing, and controlling the program or effort for the purpose of accomplishing goals or objectives

Peter Drucker noted the following important characteristics of management:

- Management is about Human Beings
- IT is deeply embedded in culture
- Every organization requires commitment to common goals and shared values
- Management must enable the program and each of its members to grow and develop as needs and opportunities change
- Every organization is composed of people with different skills and knowledge doing many different kinds of work.

Basic functions/Roles

Management operates through various functions, often classified as planning, organizing, staffing, leading/directing, and controlling/monitoring

- Planning: Deciding what needs to happen in the future (today, next week, next month, next year, over the next 5 years, etc.) and generating plans for action.
- Organizing: making optimum use of the resources required to enable the successful carrying out of plans.
- Staffing: Job analyzing, recruitment, and hiring individuals for appropriate jobs.
- Leading/Directing: Determining what needs to be done in a situation and getting people to do it.
- Controlling/Monitoring: Checking progress against plans.
- Motivation: Motivation is also a kind of basic function of management, because without motivation, employees cannot work effectively.

Key Management Challenges

1. Project Management: This involves dealing with issues of developing better planning, monitoring, controlling, and reporting progress on activities/interventions managed by Program Managers. It also means challenges of evaluating trade-offs between resource needs, time and cost in project management.

Additionally, it includes analysis in terms of SWOT analysis (analysis of Strengths, Weaknesses, Opportunities and Threats) for:

- Availability of health infrastructure and resources
- Socio-cultural-economic profile of community, geographical terrain, provision for additional inputs in program, etc.
- Performance of the program (especially trends)

SWOT Analysis

Internal assessment	Strengths	Weaknesses
External assessment	Opportunities	Threat

- **Financial Management:** This area poses challenges that focus on identifying various parameters for budget preparation and evaluation of actual financial performance; to design the appropriate management information system for periodic reporting of actual results; and to take corrective action in order to ensure that the process of fund utilization is efficient and effective.

People Management: A Program Manager has certain basic responsibilities such as setting goals and objectives, planning, resource mobilization, supervision and monitoring. However, as a program manager, you also have a very important responsibility of developing and motivating your staff. This is people management. As a program manager you do this by interacting with your staff

Exercise 1 : Undertake a SWOT analysis of RNTCP in your respective state/ district.

Managerial Styles

Some of the key people management issues faced by most TB program Managers are:

- Managing Staff performance - Handling nonperformance as well as high performance
- Managing training / skills gaps in a planned manner
- Communication – handling communication gaps, challenges, Involvement of key stakeholders, content and frequency of communication, communication with outside agencies, government bodies, other partners.
- Interpersonal Conflicts – between program staff, between teams
- Staff Discipline

As a TB Control Program Manager, you influence your staff and colleagues with whom you interact. Your role is not only to solve future problems and to help others, but also to have an impact on their ability to solve future problems. Good managers achieve their program objectives with and through their staff. You can develop your staff by building their capacity to face challenges and resolve problems. Your way of providing guidance and interacting with your staff or colleagues is called your managerial style.

There are different managerial styles and different managers have different ways of interacting with their staff. Different situations may also require the use of variety of managerial styles.

Managerial Styles for Effective Program Managers

Supportive Style: Managers act as "supportive coaches" providing support when required. They not only encourage their staff to do things by themselves, but also let their staff know that they are available, if help is needed. Managers with this style motivate their employees.

Prescriptive style: People with this style are critical of others' behavior and develop rules and regulations and impose them on others. Managers with this style make quick judgments and insist that their staff should also follow. This style uses control and does not encourage independent thinking or action.

Problem solving style: Here, a manager is concerned with solving problems by looking at them from various dimensions. The manager deals with and finds solutions to problems by involving staff or other appropriate people.

Task – obsessive style: These managers are most concerned with the tasks. Matters not directly related to the task are ignored. They are insensitive to the emotional needs and personal problems of staff.

Assertive style: They are concerned with exploring a problem, often confronting the organization to get things done for their staff. People with this style are more concerned about confronting problems rather than confronting persons. Such people are frank and open, but are equally perceptive, sensitive and respectful of others.

Aggressive Style: Managers with this style fight for their staff or their ideas by showing aggression towards others. They hope that this will help them achieve the results. Their aggressiveness makes people ignore them and not take them seriously.

As a manager you may use all the styles mentioned above. However, you may use one style more often than others. This is called your dominant style. The style you use the most other than your dominant style is your back-up style.

Discussion – Analyze your individual managerial style, where do you personally fit in and does it remain stagnant across situations. Which style according to you is most effective in managing your program.

Managerial Style – function of Subordinate Maturity

It is also relevant to note that the managerial style adopted by the Program Manager should match the maturity of the subordinate. Maturity in this situational context is assessed in relation to both psychological maturity and job maturity.

Psychological maturity refers to the self-confidence and ability and readiness to accept responsibility of subordinates.

Job maturity refers to the relevant skills and technical knowledge possessed by subordinates.

It is also believed that managers should be flexible and adjust their styles as followers and situations change over time.

Job Maturity

People with low job maturity tend to have:

- Limited skills
- Lack of adequate training

People with high job – maturity tend to have:

- Ability
- Skills
- Confidence
- Willingness to work

Psychological Maturity

If the followers are high in maturity, the manager:

- Provides a general goal
- Delegates sufficient authority to do the task
- Expects followers to complete the task as they see fit

If the followers are immature, the manager:

- Be very specific
- Tell them what to do
- Tell them how to do it
- Tell them when to do it

- Managers need to manage the program as well as the people they work with
- Managerial style may change according to the situation and persons being dealt with
- Managers have to adjust their style of managing depending upon the maturity level and readiness of the sub-ordinates

Key Tasks of Program Managers

The key tasks undertaken by the program managers are as under:

- Strategic Planning
- Organizing
- Leading
- Monitoring and Evaluation
- Strategic Planning:

What is it?

Strategic planning is a process used to build a plan about the most important goals your program should achieve in the next few years. NTEP makes Annual Action Plans which includes all aspects of planning financial, program and manpower related

Why is it important?

The planning process is important to make sure that the state responds to the changing needs of its stakeholders and outside organizations and to make sure

that everyone knows what actions will lead to achievements they intend.

What is to be included? Strategic plans should include:

- Goals for changes that will advance program's mission
- Specific actions to achieve those goals in the defined time-frame
- The priorities of those actions
- A clear assignment of responsibility for carrying out those actions

Creating SMART goals

S- Specific

M-Measurable

A- Attainable

R - Realistic

T- Timely

Specific - a specific goals has a much greater chance of being accomplished than a general goal. To set a specific goal, you must answer the six W questions:

Who: Who is involved

What: What do I want to accomplish

Where: Identify a location

When: Establish a time frame

Which: Identify requirement and constraints

Why: Specific reasons, purpose or benefits of accomplishing the goal

Measurable: Establish concrete criteria for measuring progress towards attainment of each goal, you set. When you progress, you stay on track, reach your target dates. To determine if your goal is measurable, ask questions such as .. how much?, how many? How will I know when it is accomplished**?**

Attainable: When you identify goals that are most important to you, you begin to figure out

ways you can make them come true. You develop attitudes, abilities, skills and financial capacity to reach them. You can attain any goal you set when you plan your steps wisely and establish a time – frame that allows you to carry out those steps. Goals that may have seemed far away and out of reach eventually move closer and become attainable, not because your goals shrink, but because you grow and expand to match them. You see yourself as worthy of these goals and develop the traits and personality that allow you to possess them.

Realistic: To be realistic, a goal must represent an objective towards which you are both willing and able to work. A goal can be both high and realistic ; you are the only one who can decide just how high your goal should be. Be very sure that every goal represents substantial progress. A high goal is frequently easier to reach than a low one because low goal exerts low motivational force.

Timely: To be realistic, a goal must represent an objective towards which you are both willing and able to work with no time – frame tied to it, there's no sense of urgency. You will set your unconscious mind into motion and begin working for the goal if there is a time-frame.

How to make Planning effective in your state:

- Undertake systematic situation analysis
- Set aside time for planning
- Make a planning schedule or calendar: that includes dates to do the following:
  I. Annual SWOT analysis to identify changes required
  II. Monthly review of the program direction and objectives
  III. Adjusting objectives in line with the realities of the environment
- Identify people involved in your planning
  Who will participate
  Who will approve
  Who needs to be informed?

By obtaining understanding and acceptance

- Organizing
- Organize tasks and responsibilities

Organize tasks and responsibilities to departments according to the skills required to accomplish them effectively and efficiently. Establish clear lines of authority and accountability

Selecting people

Choose people for positions based on their ability to accomplish the task of organization today and in the future.

Delegating

Entrust others with responsibility and authority and creating accountability

a Developing effective teams

Form teams composed of people within departments or from several different departments to identify problems or inefficiencies and propose solutions. Work toward improving dynamics of teams.

b. Set standards of good work

Establish clear performance expectations for each job and each employee. Train and re- train employees to meet or exceed those standards consistently.

c. Recognizing

Acknowledging good performance is a very important part of managing performance.

d. Set policies, systems and procedures

Employees need to know how to perform tasks consistently to achieve the organization's mission Policies, systems and procedures are valuable training tools for getting consistent results.

- Leading

A leader is a person who can influence the behavior of others without having to rely on force.

What is leadership?

Leadership can be simply defined as the act of making impact on others in a desired direction. He has positive attitude towards people and their work. He points the direction and others follow. In short, effective leaders are supportive, self-confident, and positive. They are pathfinders, more divergent in their thinking and have futuristic vision.

Characteristics of a Leader

Although many characteristics have been listed as typical of leaders, four are of particular note. Leaders:

- Establish the direction – visionaries
- Align people – communicate their vision and create teams to achieve it
- Motivate and inspire – energize people to overcome barriers by satisfying basic needs
- Produce change

Leadership styles

– Autocratic Style
  Requires unquestioned authority
  Emphasizes structure and order

Weakness: Can be abrasive when trust is not earned or when the issues or the audience required another style

– Participatory Style:
  Appropriate for consensus building
  Emphasizes creativity
  Requires setting authority aside
  Weakness: Can be time consuming
  Each participant has effective veto power

– Collaborative style
  Appropriate for resolving conflicts
  Requires mutual respect and authority
  Emphasizes reasonable outcomes

Weakness: Difficult to accomplish consistently

Differences between a Manager and a Leader Manager:

A manager tends to be a problem solver, seeks better ways to deploy the resources to get the job done.

Leader:

A leader, on the other hand, is a pathfinder; he is more divergent in his thinking and concerned with building the organization for future.

Leader and Manager Roles

Sl.No.	LEADER	MANAGER
1	Visionary	Planner, Organizer
2	Strategist	Controller
3	Politician/ Advocate	Supervisor
4	Campaigner	Monitor
5	Team Builder	Efficient User of resources
6	Change agent	Status quo

There is no one best leadership style

What one often finds is that as the situation or the people you are working with change, it is necessary to adapt your leadership style. This is the basis of a style of leadership, termed Situational Leadership

You may be surprised that some leaders with autocratic styles have accomplished a great deal, while some affable and completely democratic leaders have accomplished very little.

It is clear that different styles and approaches of leadership are necessary in specific situations and with specific people – this is the basic thinking behind situational leadership.

The Importance of the Situation

If the situation, or environment changes dramatically and the team member is faced with a large-scale emergency e.g. 20 cases of dengue in a hospital, then in that situation the team workers may have the knowledge but no experience or skill, and their motivation may be variable. Thus, the situation may demand a different leadership style. A similar example is a nurse who has mastered the principles of Polio has special strategies for reaching merginalised communities and run very successful mass vaccination campaigns. However, she may not have been introduced to the DOTS programme and so still relies on only monthly patient visits. You will need to modify your leadership style from delegating when it comes to EPI to a more directive style for providing her with the right leadership to improve her TB control.

5. Monitoring and Evaluation

Management is not complete without ensuring that monitoring and evaluation systems are in place. The program manager needs to develop systems for checking on the work of their team members to ensure that the desired results are achieved and to set the stage for continuous improvement.

Managerial Skills for Effective Program Managers

- Communication Skills
- Team Building
- Building Partnerships
- Managing Performance

Communication Skills

Communication is a part of every function of management, including management of health services. Good communication enhances managerial and leadership skills, as well as personal and role effectiveness. It promotes transparency and harmony in the work environment, leading to greater involvement of staff and effective team and partnership building.

As a TB Program Manager, you will need to communicate with a variety of people both within and outside the TB Program. This section deals with interpersonal communication with your staff to ensure that the work is carried out effectively.

Communication is the flow (transmission and reception) of information, ideas, feelings, attitudes and perceptions both verbally and non-verbally, between two or more parties. It embodies attitudes, behavior, body language, style, method of presentation, quality of listening and perceptions and interpretations

Communication involves at least two people – a sender or source and a receiver. Communication takes place for a purpose, is expressed as a message and sent through a channel from the source to the receiver. The receiver picks up the message, interprets it and then responds. Communication can be thought of as a process or flow; communication problems occur when there are blocks in that flow.

Understanding can occur only in receiver's mind. A person may be listening, but not necessarily understanding what may be said. Many managers overlook this fact when giving instructions or explanations. They think that telling someone is sufficient. However, communication is only truly successful when the message is also properly interpreted and understood. As per the figure

Channels of Communication

The most commonly used channels to communicate with staff are as follows:

Organizational Channels:

[A] Written communication: This type of communication becomes important when certain guidelines /procedures need to be followed

[B] Staff meetings: Meetings may be called in to give staff an opportunity to exchange information, solve problems and to give instructions about a new skill that may need a detailed explanation or demonstration.

- Training courses: These are held to update the knowledge and skills of staff.
- Lectures or seminars: These are held to introduce and explain new concepts, procedures etc.

Interpersonal Channels

Managers often communicate orally with staff members on one-on one basis, to discuss good or poor performance to motivate and counsel them, to discuss and solve problems arising at the workplace and to better understand the individual problems of the staff.

Written communication: should be precise, clear, unambiguous, and to the point to avoid any kind of confusion. The feedback on written communication is rarely instant, in fact there may be long delays in seeking clarifications.

In general, the language used must lend itself to easy comprehension and spoken or written in a manner that reflects an understanding of sensitivities of the receiver.

Email Communication: When communication is sent through email, you must be very careful to check, who else is the message copied to, in order to avoid embarrassment or breach of confidentiality.

Oral Communication: To use this medium effectively, it is important that the talk is brief, or only as long as the need be and is prepared and structured in advance to include all the points that must be said.

Barriers to Communication

The process of communication can be very complex with its various elements and variables. There are a number of barriers that impede effective communication They can come up at the level of the sender, the message, the channels of communication or the receiver.

Communication barriers at Organization level

Physical Distance

An important barrier to effective communication, particularly in large organizations is the distance between people, making messages difficult to send or receive, or misinterpreted.

Organizational Policy and Culture

Organizational Policy and climate also determine in what manner an employee is expected to communicate. Staff at lower levels within the system may not communicate easily with staff at higher levels and vice versa.

Structural barriers

Each organization develops structures, rules and regulations for achieving its objectives. There is a chain of command for reporting at various levels of authority based on principle of unity of command.

Fears

Organization communication may also be hindered because of fear among staff, as to how their message will be received. Other barriers include fear of getting exposed of lack of knowledge, having too little to offer, or even fear of punishment especially when offering frank criticism or expressing a grievance.

Key learning Points in Communication

- Communication is a two-way process through which we interact with each other.
- Effective interpersonal communication is essential for TB control Managers and is important for every aspect of their roles/functions.
- Good communication enhances managerial and leadership skills, personal and role effectiveness helps team and partnership building.
- One can improve one's interpersonal communication by being aware of the all the above elements and by practicing them to avoid any obstacle sin communication

Team – Building

As a TB Program manager one of your primary responsibilities is to develop an effective team that works towards achieving the program goals. In your role as a State TB Officer, you facilitate, motivate, and guide your team. You have to transform a group of individuals into a team, by clarifying objectives, planning operations with consensus, coordinating resources and getting things done together, despite obstacles, stress and demanding pressures.

What is a team?

The term "team" is defined as a group of individuals working together for a common purpose and goal with interdependent skills.

Four characteristics of a team

7. Team members must have a common goal and a reason to work together
8. Team members must perceive the need for an interdependent working relationship
9. Individuals must be committed to the team's efforts and
10. The team must be accountable to a higher level in the organization

Teams are different from groups. A group is a collection of individuals who may not have any of the four elements mentioned above. A team has the potential to accomplish much more than the most efficient working groups that do not work as a team. A team leader usually has a team leader who is responsible for what the team does as a whole and for who does what within the team to achieve the objectives. The team leader is also a team member.

As a TB Control Program team leader, you need to have the knowledge, skills and capability to build a team as well as ensure that the team works together to achieve a common goal. You would also need to adopt a managerial style that helps your team to work more efficiently.

Build a Team

Team building and development are important for several reasons

i. As a tool for good management
ii. Stress among team members is reduced as problems are solved through sharing of workload
iii. More innovative and creative ideas are generated, this improves team performance.
iv. Teams can solve complex, multi-interdisciplinary and interpersonal problems more effectively than a group of individuals.

It is important for you as a manager to build an effective team in which various players (your staff) work harmoniously together with an understanding of each other's position, role, tasks and capabilities. You as a manager need to focus on the following:

- Setting goals and priorities
- Deciding means and methods to work
- Examining ways in which the team works
- Exploring the quality of working relationships

You would also need to adopt a managerial style that helps your team to work more effectively and efficiently.

The success of a team is dependent on a common understanding among members of the team of their roles and responsibilities. The team members should be clear on:

- what their job is and how it relates to the work of others in the team
- the work and duties of all team members. This is to avoid duplication, overlooking of key tasks, or one person taking on too much.
- how each one's role relates to the team's goals

What are Effective Teams?

An effective team is one that achieves its specific objectives in the most efficient way, making the best possible use of resources and in the shortest span of time. It is always in a position to take up more challenging tasks. Such a team will have reached high levels on the desired outcomes of each stage in the team building process.

An effective team is one in which team members give their opinions and comments without hesitation (reducing the team's closed areas) listen to and examine opinions comments and feedback given by colleagues at all levels – (reducing the team's blind areas) and are sensitive to the needs of other members in the team.

Yet another way of analyzing team effectiveness is to view the level of team empowerment by looking at:

3. Clarity of roles within the team
4. Level of autonomy of the team
5. Support provided to the team in terms of resources
6. Accountability of the team to achieve the goals to which commitment has been made.

Important points to remember

- As a Program Manager, you have to build your team which has complementary skills. This will help you in achieving the objectives through your people.
- A team has the potential to achieve much more than a group of talented individuals not working as a team
- As a State TB Program Manager, your ability to build and lead a team is crucial to the success of the program in your state

Building Partnerships

As a TB control Program Manager, you are aware that effective TB Control services can no longer be a function of the public health system alone. Experience with planning

National TB Programs has led to the recognition that the public health sector alone cannot meet the requirements posed by increasing caseloads, while simultaneously tackling all the cultural, social and economic factors that influence TB as a disease. For effective implementation of DOTS Strategy and in order to increase the reach and application of DOTS, it has become clear that it is necessary to identify and reach out to all the health care providers in both public and private sectors and further to all stakeholders in the non- health sectors.

It is essential that patients, their families and communities are also included in the fight against TB.

Partnership Mutuality

Partnerships among individuals and groups have four overlapping characteristics that benefit all parties concerned:

- Networking to share information
- Co-operating to provide resources to each other for achieving common goals
- Working collaboratively as individuals or teams towards these common goals
- Joining forces as partners in a common mission to help one another, e.g. Private Practitioners may help a TB clinic to conduct its activities. This is referred to as partnership mutuality.

The TB Program is such where inter-sectoral partnerships could prove extremely useful in program implementation as well as in policy making, planning, program evaluation, advocacy and generating additional resources.

The following are the key aspects that characterize a partnership with the potential to build a long-term relationship:

- Shared vision and commitment

A vision is a realistic idea that is desirable for the program and its members and can be achieved through joint efforts. Commitment refers to contributing something of value such as time, money, resources or moral support

There should be a common vision to which all partners are committed

- Super-ordination

An overall goal is important to all partners concerned, and should be one that one entity working alone could not achieve. The goal should be seen as a shared goal that all persons or partners concerned should be seen to benefit from.

Everyone should gain

16. Mutual Trust

Mutual trust leads to co-operation. Trust indicates a belief that the power of the individual partner will not be used in a harmful way

The power of the stronger partner should not be used against the weaker partner

17. Appreciation of each others' strengths

Building partnerships is based on recognizing the strength of each partner, accepting and appreciating contributions made by each and making the most of each others' contributions.

The strength of one will be recognized by the other

- High pay off perceived from a long –term relationship

  Partner programs or organizations become proactively involved in partnerships if each of them perceives some long term gain.

Partnership should generate a perception of high pay-off

6. Shared ownerships of outcomes (positive or negative)

Eventually, the program and its member partners need to develop by taking personal responsibility for both successes and failures

In both success and failure, all partners will be responsible

- Open and Frequent dialogue

Openness is required for exchanging feelings, receiving and giving ideas, feedback and constructive criticism

There should be open and frequent dialogue among partners

Important Points to Remember

As a TB Program Manager, you should be aware of the strength of partnership and the benefits that it can bring to program success.

The concept of partnership mutuality (making sure that everyone benefits) will help in building strengthening and sustaining good partnership

MANAGING STAFF PERFORMACE

Management is about "getting things done". As a TB program Manager, you will be required to deal with performance issues of staff from the general health system as well as key RNTCP staff. You will have some staff who will be good performers, others who will perform with more support and guidance while there will be some who do not perform even with adequate support. As a program manager you will have to deal with performance issues in a proactive, constructive and decisive manner.

What is Performance Management?

Performance Management is not a system or technique; it is the sum of the day-today activities of all staff. It is also the systematic evaluation is employees' job performance and his/her potential for growth and development. It enables the TB program manager to not only identify performance gaps against set objectives but also helps the Program Manager identify training and re-training gaps.

The following is an important framework for Performance management of staff in the program

As a TB Program Manager, you should:

- Set objectives for your staff
- Agree on the objectives jointly
- Agree on measure of objectives
- Agree on realistic time scale for achievement
- Make them achievable yet challenging
- Review Progress regularly
- Support and Guide through the year
- Identify Performance Improvement Plan in case of performance deficiency
- Take appropriate action for performance improvement and agree with the job holder for the same.

FEEDBACK

Communication of information about an aspect of performance or behavior and its effects.

One of the key processes in managing performance of program staff is feedback. Many use it as just a word in ordinary English language. In the context of managing staff performance it is one of the most important and critical activities in the cycle of Performance Management.

Giving feedback is as much an art as it is a science. Below are some of the key aspects of feedback that will bring clarity to the whole concept and application of feedback that all program managers must remember

Types of Feedback

Positive Feedback

- Emphasize strengths
- Mention areas of development
- Be sincere

Benefits: Closer relationship

Increased motivation and mutual respect

Negative Feedback

- Sympathize and support
- Do not blame or criticize
- Stick to priorities
- Sandwich positives and negatives
- Always end on a positive

note – Risks: De- motivation, loss of confidence

When do you give feedback?

- Continuously as a part of the performance management cycle
- Immediately after a positive or negative action
- Praise in public, criticize in private
- Pre- appraisal discussion

Johari Window – also known as the disclosure / feedback model of self awareness

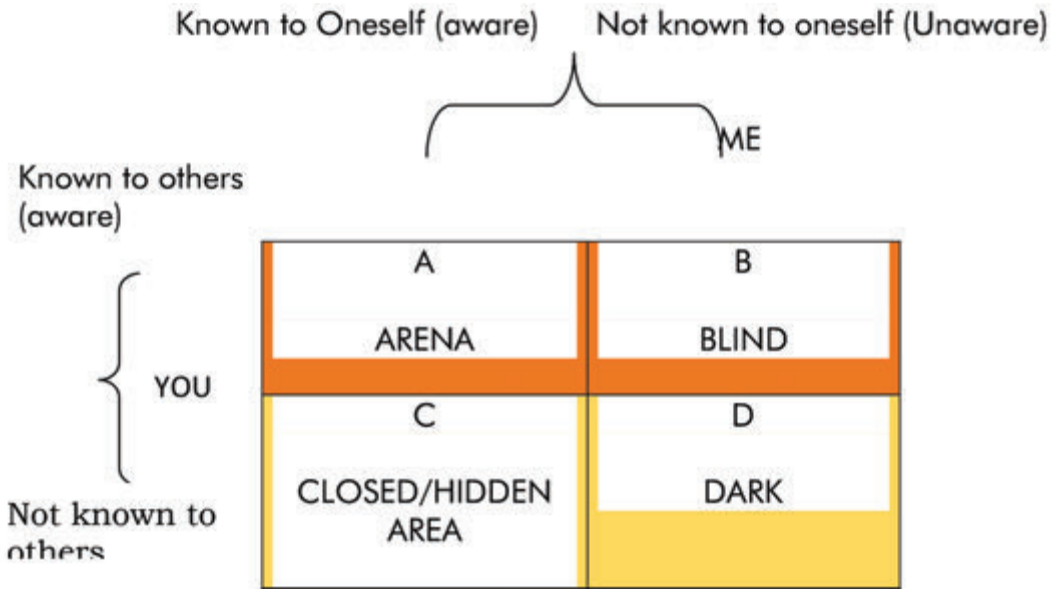
This model very effectively illustrates the process of giving and receiving feedback. The Johar Window model can also be used to assess and improve a group's relationship with other groups. The Johari Window model was devised by American Psychologists Joseh Luft and Harry Ingham in 1995, while researching group dynamics at the university of California Los Angeles. Purpose: This model will assist you as managers to gain an understanding for and appreciation of how effective feedback and self disclosure can improve communication skills.

What is Johari Window:

It is named after the first names of its investors Joseph Luft and Harry Ingham in 1995

It is communication window for giving and receiving information

It is one of the most useful models for describing the process of human interaction



According to this model, there are two dimension for understanding 'the self" – those aspects of a person's behavior that are known or unknown to oneself and those aspects of behavior that are known or unknown to others (those with whom one interacts). A combination of these two dimensions gives 4 areas about the self, as shown above.

Explanation of the Model

A- The upper left-hand square is the arena or the public self that part of one's behavior known both to oneself and to others with whom one interacts. The arena includes information such as name, age, physical appearance, location address etc., It is an area characterized by a free and open exchange of information between oneself and others.

The Arena increases in size as the level of trust increases between individuals or between an individual and the group

Role of Manager : Giving and soliciting feedback constantly

B. The blind area represents those aspects of one's behavior and style that others know but that we do not know or realize. We may not be aware of certain mannerisms but others perceive them as funny. For example, a staff member may be surprised to hear that their method of asking questions annoys others because it is interpreted as cross – examination, rather than curiosity or request for information.

Role of Manager: provide feedback to the staff member to be aware of his blind areas through timely feedback

C. Closed or hidden area represents things that we know about ourselves but do not reveal to others. Issues in this area are a secret. For example a staff member may be annoyed if their manager does not ask them to sit down during a meeting, but they may remain standing without letting the supervisor know that they are annoyed. The manager may think that the staff do not mind standing and accepts their behavior as a part of their official relationship. Most people have many such feelings in the closed areas that they are unwilling to reveal to the persons concerned.

The model above as a communication window through which you given and receive information about yourself and others

Role of Manager : Giving feedback and encouraging self disclosure

D. The fourth area is the dark area, aspects of ourselves that are unknown to us and to others. The person may never become aware of material buried far below the surface in the unconscious are. This unknown area represents intrapersonal dynamics, early childhood memories, latent potentialities and unrecognized resources.

Role of Manager : Constant exchange of communication

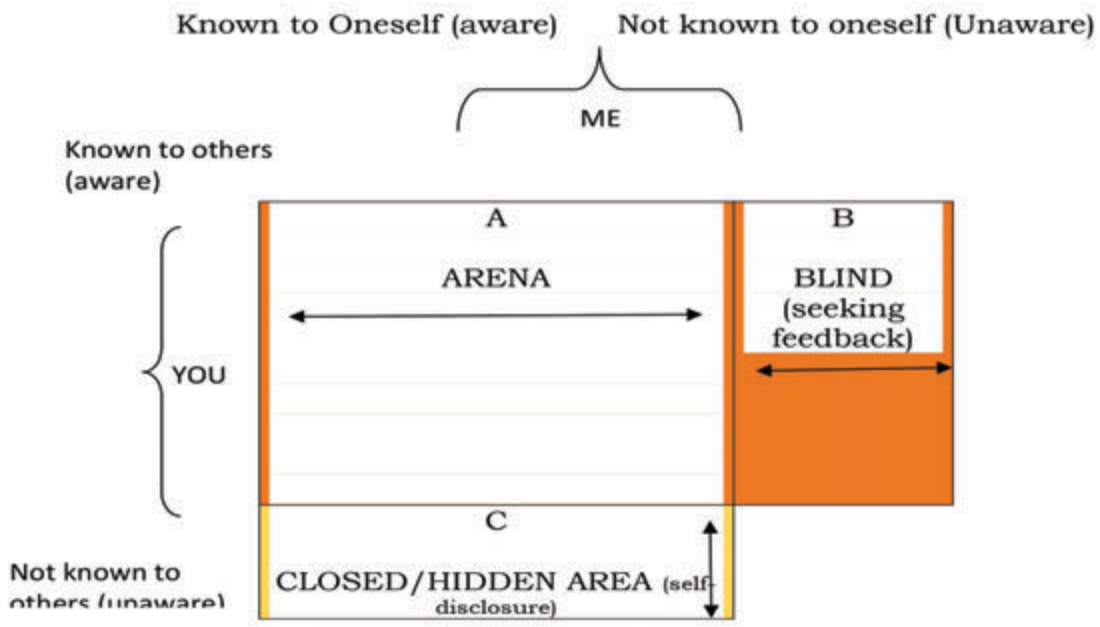
Implications for TB Programme Managers

As a programme manager responsible for human resource management you should focus on increasing the A rea through greater and more open exchange of information between yourself and others around you.

Increasing the area can be done in two ways:

Reduce the closed area ©

Reduce the blind area (B)



Points to remember

- The success of TB control program depends not only on technical expertise but also effective managerial and people management skills
- Each one of us has 4 areas of arena, blind, closed and dark in varying proportions
- To increase our effectiveness, we must increase the arena while decreasing the blind and the closed.
- This can be done through self-disclosure / openness (reducing the closed area) and use of feedback (reducing the blind area)
- We should increase the personal effectiveness of our staff through appropriate feedback and sharing

1. Which pane of the Johari Window reveals information about your hair color?

- A
- B
- C
- D

2. Which pane of the Johari Window reveals information about your secret dreams and ambitions

a) A
b) B
c) C
d) D

3. In a typical relationship, the sooner two individuals engage in self disclosure, the better it will be

a) True
b) False

How to give Feedback

Some types of feedback serve only the needs of the person giving it and not the needs of the person receiving it. This is likely to produce defensive reactions from the recipient and they are unlikely to amend their behavior as a result, hence how you as a program manager give feedback is equally important.

7. Feedback should be in terms of specifics and observable
8. Perceptions, reactions and opinions should be presented as such, not as facts
9. Feedback should refer to the relevant performance, behavior or outcomes, not to the individual as a person
10. Feedback should be concerned with those areas over which an individual can exercise some control and may include indicators of how the feedback can be used for improvements or planning alternative actions.

In a nutshell:

Be specific

2. Describe what you see
3. Identify priority areas
4. Focus on Behaviors

Be constructive

10. Ask the job holder about his perspective
11. Transform problem areas into developmental opportunities
12. Find solutions together
13. Two- way process: Listen actively.

Examples of Giving Effective Feedback

Motivational

"I am impressed with the effective communications you have with the TB treatment volunteers. You seem to have developed a trusting and open relationship with them over the past few months"

Developmental "I have observed that some TB treatment volunteers forget to send the patients for follow-up sputum examinations. It may be helpful to remind them to do so at your meetings with them"

We should increase the personal effectiveness of our staff through appropriate feedback and sharing.

Feedback should be a continuous process. There should be no surprises for the staff member.

How to receive feedback?

Feedback is always about past and therefore receiving feedback offers the possibility of learning something valuable which may serve as a base for future development and improvement.

The following steps can increase the value of feedback for the receiver:

- Listen carefully
- Ask questions to clarify disagreements or comments
- Evaluate what is being said
- Do not over-react to feedback, but you may wish to modify your behavior in suggested directions and then evaluate the outcomes.

Managing poor performance

As a TB Program Manager, managing poor performance is one of the most critical challenges that you will face. Here feedback is an important tool through which the process of addressing poor performance issues, can be initiated. Some of the tips for managing below average performance for TB Program managers are as under:

13. Deal informally with minor problems, through constant feedback, monitoring and support
14. Arrange a meeting – collate the facts and remain objective
15. Allow plenty of time for the individual to state their point of view
16. Options to deal with this problem for program managers
17. Set short-term well-defined objectives
18. Development interventions
19. Re-organize the job responsibilities
20. Agree corrective action and review periods
21. Keep a record / make note of discussions

Managing staff performance is not an annual activity it is an on-going process. Ignoring staff performance issues can have long term implications on the program.

Appropriate interventions have to be made by the TB Program Manager to address performance deficiencies.

Feedback is an important tool to be used appropriately by program Managers on an on-going basis.

TB Program Managers should have the courage to say to say tough things to staff in relation to performance, behavior and training.

It is important to be objective and evidence based when giving negative feedback

Exercise:

As a TB program manager, if one of your staff members is not performing up to the expected standards. Discuss your strategy to best handle this situation?

Conclusion

Finally, it is important to highlight that the overall goal of this training is to provide participants with the necessary understanding and skills to develop and strengthen the management of TB program in their area. The skills learnt through these modules could, however, cut across functions and departments and can well be applied in the context of other disease control or health projects as well.

Annexure 1

विकास शील
संयुक्त सचिव
VIKAS SHEEL
Joint Secretary

सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली - 110011
Government of India
Ministry of Health & Family Welfare
Nirman Bhavan, New Delhi - 110011
Phones : 23061481, 23063506 (T/F)
E-mail : jsnvbdcp-mohfw@gov.in

D.O. Z-28015/36/2017-TB(Pt-IV)

Dated the 7th March 2019

Kindly refer to the earlier communication from this office vide D.O. letter No. Z-28015/36/2017-TB(Pt-IV), dated 11th January 2019, revised norms and basis of costing under RNTCP were issued to the states to make suitable provisions of its use for PIP Proposals for Financial Year 2019-20 in anticipation of approval of Mission Steering Group (MSG). It may be noted that the norms and basis of costing shared earlier have been approved in the 6th meeting of the Mission Steering Group (MSG) of National Health Mission. The norms and basis of costing under RNTCP as approved by MSG are placed at Annexure. The revised norms can also be accessed at www.tbcindia.gov.in.

Yours sincerely

7/3/19.

(Vikas Sheel)

Encl. As above

To

Additional Chief Secretary/Principal Secretary (Health)/Secretary (Health) – All States/UTs

MD-NHM – All States/UTs

State TB Officers – All States/UTs

Annexure 2

NORMS AND BASIS OF COSTING FOR RNTCP

These are indicative norms and may be used as a guide to prepare annual action plans and budgets. These may not be deemed to be limiting factors and States may provide justification to NHM/NPCC/CTD in case they need to incur expenses over and above these norms. For North-Eastern states (Arunachal Pradesh, Assam, Nagaland, Mizoram, Meghalaya, Manipur, Tripura and Sikkim), these norms would be applicable at the rate of 1.3 times as compared to the rest of the country except for the expenditure under the head "Contractual Services" or contractual staff in other heads.

Norms and Basis of Costing for NTEP

Norms	Basic of Costing (Unit Cost)
1. Civil Works	
• Designated Microscopy Centre (DMC)-1 DMC per 1 Lakh population.(In tribal/hilly/difficult areas 1/50,000 population). States can relax norms in case of additional requirement of DMC based on geographical or technical considerations and may consider to have DMC at all health facilities, if required. • Tuberculosis Unit (TU) – 1 per 200.000 (1.5 to 2.5 lakh range) population for rural and urban population and 1/100,000(0.75 to 1.25 lakh) population on hilly/tribal/difficult areas with the overall aim to align with NHM BPMU for optimum resource utilization and appropriate monitoring. • DTC 1 per revenue district / NHM District Programme Management Unit. • DRTB Centre (formerly DOTS plus site): o Nodal: 1 per million population o District level: 1 per district (4-5 beds/OPD based) o Additional or increase beds if DRTB patient load is more. • State Drug Store (SDS): 1 per 50 Million population • For civil work, plumbing, electrical and other repairs for facilities/structures under RNTCP like STC, STDC, SDS, IRL, NAAT Labs, C&DST lab, DRTB Centre, DTC, DDS, TU, DMC etc.	Initial Establishment / Refurbishment/ Upgradation / Maintenance of Civil work to be carried out as per the rates prescribed by the PWD or Cell/Division/Corporation/Wing for Infrastructure Development

2. Laboratory materials	
• Lab consumables for DMCs, NAAT, Culture/ DST laboratories, STDCs, NRLs and IRLs to be procured. • The detailed list of laboratory material is given in the RNTCP laboratory QA protocol/ programme website.	• The cost is based on presumptive TB and DR-TB examination in a year, estimated based on consumption of previous year. • The State Health Society/District Health Society may have the flexibility of proportionately increasing the expenditure on laboratory consumables. • Funds to be budgeted based on the work-load, central supplies of lab consumables and other projects and trends of expenditure.
3. Honorarium/ Counseling Charges	
• Incentive to informant for referral of presumptive TB patients to public health facility are to be given on diagnosis of TB. • There is no upper cap of honorarium for treatment support. • The honorarium/counselling charges are to be paid to volunteers supervising drug sensitive or drug resistant TB patients for public sector or private sector patients. • The honorarium/counselling charges for provision of treatment support will be paid only to such workers who are not salaried employees of the Central/State Government. This would include among others Anganwadi workers, trained dais, village health guides, community volunteers, ASHA, private providers, private chemists, family members etc. • For active TB case finding activities, honorarium will be paid to the volunteer for house to house visit or visit to high risk area.	• Incentives to informant for notification o Rs.500 for referral of presumptive TB patient to public health facility and diagnosis as TB. • Honorarium to treatment supporter to be disbursed upon completion or cure of TB patient as below o Rs.1000 for Drug Susceptibility TB patients o Rs.5000 (Rs.2000 for IP and Rs.3000 for CP) for Drug Resistant TB patients (including shorter regimen, MDR and XDR TB Patients or as per latest programme guidelines) • Rs.25 per injection prick • Volunteer supporting active TB case finding for house to house visit or visit to high risk area may be paid and honorarium as decided by the State NHM.
4. Advocacy Communication Social Mobilization(ACSM)	
The ACSM campaign would be for all the stakeholders including the different target groups i.e., medical professionals, paramedical, patients, relatives of patients and community. This includes various activities like patient provider meeting, community meeting, CME, communication facilitator cost, print media, electronic media, social media, activities in school/ educational institutions, advocacy meetings, cost for communication between stakeholders, campaign for intensified case finding, community radio, PRI involvement, involvement of FBOs, activities during World TB Day/week, nukkadnataks, street plays, puppet shows, brand ambassadors, activities targeting universal access, special population like migrants, tribal and slums, TBHIV, MDR-TB, etc. Funds include cost of IEC Agency to hire for local need based ACSM state level initiatives.	• Budget for ACSM activities at State and District level would be as per ACSM plan (to be prepared and submitted along with PIP). • ACSM activities to be planned as per the need and recent updates in programme strategies.

5. Equipment Maintenance	
Maintenance/upgradation/calibration costs for Laboratory equipment, office equipment like computers, photocopier, fax, ECG machines etc. and IT equipment (like PDA/handheld device/tablets/phablets) are included under this head.	• Maintenance costs for the equipment should be estimated on the basis of the current market cost. • For budgeting purpose, maintenance cost should be considered up to 15% of the cost of the equipment or tendered rates (whichever is available). • The maintenance fund can be pooled at state or district level as per the requirements of the State.
6. Training	
• The training of STO/DTOs will be organized in coordination with central institutes/CTD. The other categories of staff will be trained at State/District/Sub-District level. It also includes sensitization. The training will be held in batches and cost for each batch of training for different category of staff is calculated applying the various approved norms.	• Training to be planned as Initial Training, Retraining and Update training. • The budget for training to be planned based on the training load, additional trainings for newer initiatives and revision of guidelines. • The norms for TA/DA, Honorarium, Refreshments, Course Material, Vehicle Hiring, Accommodation, Venue Hiring Incidental expenses should be as per State/NHM norms.
7. Vehicle operation (POL & maintenance)	
• Vehicles used for supervisory visits by DTO, MO-TC and contractual staff under RNTCP are budgeted on the basis of: Kilometers traveled/day, number of days in a month and current cost of POL. • Total amount includes repairs, spare parts, insurance, tax, helmets, PUC, essential accessories, service charges, etc. which may be required for the maintenance of vehicles. • Higher amount can be allowed based on fuel cost, distance traveled and fuel efficiency of vehicle. • Appropriate travel documentation including Advance Tour Planning, tour dairy/report, vehicle log book is to be ensured. • In case of increase in POL costs, corresponding increase in norms for vehicle operations & maintenance will be made at Central level from time to time.	• Cost of POL and maintenance should be taken as per actuals or State/NHM norms. • In case of 4 wheelers, funds for vehicle operations are only provided to districts which have four-wheelers from system/programme rather than hired vehicles. • Vehicle operation cost (POL only) support can be extended as per actuals for non-programme/personal vehicles used for programme purpose (if programme vehicle has not been provided) as per actual cost within the monthly limit as prescribed by programme.
8. Vehicle hiring	
Vehicles are hired where RNTCP or state government vehicle are not available for supervisory visits. Appropriate documentation for supervisory visits to be ensured. MOTC/Officer/Staff having NHM hired vehicle available for supervision and monitoring, cannot hire additional vehicle.	• Vehicle hire (inclusive of POL/driver and all costs except toll tax) • Cost of vehicle hire should be taken as per State/NHM norms.

Staff	No. of vehicles eligible
PPM Coordinators- state level	1 (up to 15 days a month)
HIV- TB Coordinators State level	1 (up to 15 days a month)
State TB Cell	1 for States with population <10 million(3 for state with population> 30 million & 2 for states with population 10-30 million) per month
STDC	1 per month
DTO	1 per month (2 for type A districts)
MO-TC	1 (up to 7 days per month)
CTD	Up to vehicles per month

Vehicle hire is allowed only for the days of supervision & monitoring or official visits. State level officers & Coordinators can hire vehicles for the days of supervision and monitoring visits.

9. Public-private Mix: (PP/NGO Support)

Activities included in this head are payments of NGO/PP schemes grant-in aid activities undertaken for involvement of NGO/PPs, Cost of the state and district level PPM Coordinators and TBHVs, and costs for pilots/ innovations for improving TB control at central/state/district/sub-district level.

NGO/Agencies/Institutes should be registered under State Societies Act/Societies Act/ Companies Act or Trusts Act with their Memorandum/Articles of Association expressly stating that the company/Society has been formed for purpose of non-profit and has its independent sources of funding and is not solely independent on any programme funds.

Private practitioner / clinic/ dispensary/ hospital/ agency/ individual/ institute/ organization should be registered with the appropriate authority.

- NGOs/PP working for or planning to work for TB Control Programme are required to follow the NGO/PP guidelines of RNTCP
- Out of the total available budget under this head, up to 10% can be utilized for activities involving promotion of NGO/PP involvement, up to 30% can be utilized for piloting/ innovations activities which are included in the action plan and approved from CTD.

Norms for various schemes are as provided in the latest National Guideline on Partnership issued by RNTCP.

Support to Hospitals with only PG degree/DNB courses(other than those included in medical college task force mechanisms) :

These hospitals/health facilities to be included in various NGO/PP schemes based on the functions like TB diagnostic facility/DMC, DOT Adherence, Notification etc.

Private Provider Engagement

- Cost of free Diagnostic tests and Drugs either through reimbursement or strategic purchasing as per actual costs
- The incentives of Rs.1000 provided to Private providers for notification and reporting of treatment outcome. Incentives will be given two installments (Rs.500 at notification and Rs.500 on reporting treatment outcome)
- Public Private Support Agency (PPSA) Cost for notification of patient, end-to-end Coordination/Engagement with providers and /or patient support as per tendered rates

• Private Provider Engagement using incentives, public private support agency, ensure free diagnostic test and drugs linkages for access to diagnostics and drugs including reimbursement.	• Cost of linkages if drug or diagnostic access & reimbursement/voucher systems as decided by the State NHM • Incentives for private pharmacist / doctor supporting dispensing drugs from their level may be planned for dispensing / storing and for supply chain management.
10. Medical Colleges	
• Medical colleges will be provided funds through concerned State/District Health-TB Control Societies for activities relating to referral of cases and treatment, operational research, sensitization and advocacy among the staff, faculty and medical students. • National/Zonal/State Task forces have been formed for medical college involvement under RNTCP. The cost for travel and per diem for the Chairman and members of these task forces for attending task forces meeting and follow-up visits to the medical colleges in their jurisdiction would be borne by the respective health societies. The organizational cost for such meetings would also be borne by respective Societies. • Meetings/Visits to be conducted by the Tasks forces will be as under: o NTF- Whenever called for ZTF meetings o ZTF- Quarterly meetings of ZTF and all STF within the zone will be visited once in six months o STF- Quarterly meetings of STF and all medical colleges in the state will be visited once a year	• Provision has been made for need based training/sensitization of resident doctors/faculty/interns/staff of all departments in RNTCP. It is expected that 50 residents/year/medical college would require this training. Budget may be based on training plan to be submitted at time of preparation of action plan using NHM norms. • A thesis grant of Rs.30,000 for research on RNTCP priority areas will be approved by State OR Committee at an average of one thesis per medical college per year in the state. All post-graduate degree/diploma students undertaking thesis as a part of their MCI recognized studies will be eligible for thesis grant. • Provision is also available for support to conferences, symposiums, panel discussions and workshops organized at National and State levels and at level of Medical college. o At the National level- Rs.4 lakhs per conference for 8 conferences annually; o At the state level- Rs.1 lakh/- per conference for 4 conferences annually. o Sponsorship of plenary session on RNTCP in seminars/ CME/ Workshops up to Rs.10,000/annually for a medical college. • Organizational cost for each meeting of Task Force and operation research will be as per norms of training head. • Travel costs and per diems for participation in STF/ZTF/NTF, for attending the training, participation in meetings and internal/ central level evaluations/ appraisals will be borne under this head. TA/DA norms as per the training head • STF Chairman- office and miscellaneous costs.

<table>
<tr><td></td><td>Norms used for guiding the budge are as follows:
<table><tr><th>Activity</th><th>Amount</th></tr><tr><td>Stationary and Misc Fund for ZTF offices</td><td>Rs.2000</td></tr><tr><td>Stationary and Misc Fund for STF offices</td><td>Rs.2000</td></tr><tr><td>Miscellaneous- core committee expenses, postage, communication, fax, etc. per medical college</td><td>Rs.10000</td></tr><tr><td>Allowance to existing manpower with STF Chairperson for clerical assistance and data management</td><td>Up to Rs.1000 per month</td></tr></table>
These are norms for budgeting purpose and travel cost will be as per the actual at the rates/ norms as mentioned in the training head. Accommodation to be done by organizers for the residential meetings from this head as per the local cost and DA o be paid to the participant as per the norm of training head except for ZTF/NTF which norms are stated in this head itself.</td></tr>
<tr><td colspan="2">11. Office Operation (Miscellaneous)</td></tr>
<tr><td>Office Operation expenditure includes janitorial expenses, electricity, telephone bills, data user charges, video conferencing charges, internet cost, fax bills, postage/courier, office stationery, office furniture for STCs/STDCs/DRTB Centers/ C&DST laboratories/DTCs/TB Units/DMCs/ NAAT Labs, display boards, repair of furniture, hiring of daily wage labor for loading and unloading of drugs, sputum transportation box, drug boxes for Cat IV/V, recruitment/procurement/EOI/RFP advertisements, transportation of drugs from State drug store to district store, office rental etc. Original software license including annual renewal, if any, for each computer system (Operating System, Office, Antivirus etc.) for database (at national level) and for firewall (at national level). Internet connectivity and operating cost of PDA/tablet computer will be included as per actuals.</td><td>Only cost not covered by State/Districts budgets will be provided under project funds.</td></tr>
<tr><td colspan="2">12. Contractual Services</td></tr>
<tr><td>State Level:
1. Surveillance, M&E and Research Unit:
1 Epidemiologist (Asst. Programme Officer)
1 NIKSHAY Operator
Data Analyst (only existing; no new post to be created)
Driver (only existing; no new post to be created)
2. Diagnosis & Treatment (DSTB & DRTB):
1 Medical Officer-STC
1 HIV-TB Coordinator</td><td>Contractual Staff (State Level):
• Compensation package for the contractual staff will be decided by the respective State based on state specific situation, job contents, job responsibilities and compensation for similar positions in other programme under NHM.
• The existing staff will get annual increment based on the satisfactory performance at a rate decided by the State NHM.
• Loyalty bonus: As per NHM Norms.
• Contract period will be as per the State NHM decision.</td></tr>
</table>

1 DRTB Coordinator

3. Partnership, ACSM & Patient support unit:

1 State PPM Coordinator

1 State ACSM Officer

4. Finance and PSM unit:

1 Technical Officer- Procurement & Logistic Personnel

1 Accounts Officer

1 Secretarial Assistant

STDC

1 Epidemiologist

1 Medical Officer

1 NIKSHAY Operator

1 Secretarial Assistant

IRL:

1 Microbiologist

1 Microbiologist-EQA

1 Sr. Lab Technical EQA,

5 Sr. Lab Technician (Additional positions based on work load)

1 NIKSHAY Operator,

1 Lab Attendant

1 Bio-Medical Engineer only for states with more than 5 C&DST Labs

Culture & DST Lab (without IRL)

1 Microbiologist

5 Sr. Lab Technician (Additional positions based on work load)

1 NIKSHAY Operator,

1 Laboratory Assistant

(Staff in C&DST Lab to be increased based on work load and additional technologies being used, number)

State Drug Store (SDS)

1 Pharmacist cum Storekeeper

1 Store Assistant (Additional post if >1800 Cat IV/V monthly boxes preparation per month)

Nodal DR TB Centre

1 Medical Officer

1 Statistical Assistant

1 Counsellor

District level:

1 Medical Officer(DTC)

1 NIKSHAY Operator

1 Senior DRTB TBHIV Supervisor

1 District PPM/ACSM Coordinator

1 District Programme Coordinator

1 District Pharmacist (30% of DDSs)

- Contracts will be renewed by the society based on satisfactory performance.
- The TA/DA norms will be as per the NHM guidelines. DA (daily allowance for travel) is only to be released against appropriate documentation. Where eligible such DA may be paid under State Government rules or as mentioned in supervision & monitoring head.
- A fixed allowance of Rs.1500 per month as per State Norms will be given to contractual staff at TU/DMCs in notified tribal/hilly/difficult areas.
- The Performance (Workload) based incentives will be given to the contractual staff at State/district/sub-district level. Decisions related to performance-based incentives centered on core performance indicators as below. These indicators are based on consideration of workload to the Staff also. The indicators would be changed as per the programme priority time to time from the Central level. Indicators targets can be revised by the State a priory, depending upon the variation in epidemiology of district.

Senior TB Treatment Supervisor

Sr. No.	Performance Indicators	Score
1.	% increase in total TB notification (public + private)	
	<10%	0
	10-20%	5
	>20%	10
2.	No. of health facilities to be supervised by the TB unit (public + private)	
	<10	0
	10-30	5
	>30	10
3.	Treatment success rate of new TB patients in TB unit (public + private)	
	<80%	0
	80-90%	5
	>90%	10
4.	% of eligible patients and treatment supporters provided financial support under RNTCP through DBT	
	<50%	0
	50-75%	5
	>75%	10
5.	% of diagnosed/notified TB patients (drug sensitive and drug resistant) put on treatment	
	<90%	0
	90-95%	5
	>95%	10

1 District Accountant

Driver(only existing; no new post to be created)

Senior TB Laboratory Supervisor:

1 per 5 lakh population (1 per 2.5 lakh population for tribal/hilly/difficult areas).

Senior Treatment Supervisor(STS) (1 per 1.5 to 2.5 lakh to be aligned with blocks for optimum resource utilization and appropriate monitoring) (In case of hilly/tribal/difficult areas 1 per 0.75 to 1.25 lakh population to be aligned with blocks)

(additional STS if>300 cases registered in public sector annually in a TU; additional STS if>50 private health establishments registered in NIKSHAY in a TU and >200 TB patients notified from these private health establishments annually in a TU)

TBHV: 1 per lakh urban aggregate population in the district

Laboratory Technician (up to 30%of the DMCs) 1 Lab technicians (1 per health facility having a lab and a microscope.

Health system approach as per NHM policy to be applied by bringing together all facility based service deliver HR together an implement IPHS and workload as the basis to determine the number of positions).

*Existing Data Entry Operators at State and District level are redesignated as NIKSHAY Operator at respective levels.

Medical College

1 Medical Officer

1 Lab Technician

1 TB-HV

District DR-TB Centre:

1 Counsellor (Health system approach as per NHM policy to be applied by binging together all facility based service deliver HR together and implement IPHS and workload as the basis to determine the number of positions)

Senior TB Laboratory Supervisor

Sr. No.	Performance Indicators	Score
1.	No. of TB laboratories to be supervised (microscopy & molecular diagnostics) in defined area (public + private)	
	<5	0
	5-10	5
	>10	10
2.	% of increase in examination rate of presumptive TB patients in a year	
	<5%	0
	5-10%	5
	>10%	10
3.	Drug Susceptibility Testing of notified TB patients in defined area (public + private)	
	<80%	0
	80-90%	5
	>90%	10
4.	% of notified TB patients with known HIV status (public + private)	
	<70%	0
	70-85%	5
	>90%	10
5.		

TB - Health Visitor

Sr. No.	Performance Indicators	Score
1.	No. of TB patients in care in a year (public+ private) in area	
	<100	0
	100-200	5
	>200	10
2.	No. of health facilities to be supervised in area (public+ private)	
	<5	0
	5-20	5
	>20	10
3.	% of Children (<6 year) household contacts of pulmonary TB patients initiated on INH chemoprophylaxis	
	<80%	0
	80-90%	5
	>90%	10
4.	Adherence score of TB patients on 99 DOTS (public+ private)	
	<70%	0
	70-80%	5
	>80%	10
5.	% of eligible patients and treatment supporters provided financial support under RNTCP through DBT	
	<50%	0
	50-75%	5
	>75%	10

District TB Centre and State TB Cell
The Performance (Workload) based incentives will be given to the District TB Centre Staff and State TB Cell Staff based on following indicators.

Sr. No.	Performance Indicators	Score
1.	% increase in total TB notification (public + private)	
	<15%	0
	15-25%	5
	>25%	10
2.	Treatment success rate of new TB patients in TB unit (public + private)	
	<70%	0
	75-85%	5
	>85%	10
3.	% of eligible patients, treatment supporters and private providers given financial support under RNTCP through DBT	
	<50%	0
	50-75%	5
	>75%	10
4.	Drug Susceptibility Testing of notified TB patients in TB unit (public + private)	
	<50%	0
	50-70%	5
	>70%	10
5.	% Human Resource in place at respective state/district level	
	<80%	0
	80-90%	5
	>90%	10

Incentive Structure

Sr. No.	Performance Grade	Total Scores	Incentives
1.	Grade A	>40	30% of total remuneration for staff
2.	Grade B	20-30	15% of total remuneration of staff
3.	Grade C	10-20	5% increment will not be given

13. Printing	
Printing of stationery items such as treatment cards, patient identity card, TB register, laboratory form, referral form, notification form, health establishment registration form, transfer form, training modules, quarterly report format, research reports, Action Plans and other formats required for Programme implementation at State/District level. Modules, registers, guidelines etc. needs to be undertaken at state level while the forms, identity cards, reporting formats etc. to be district level printing. Printing of prototype materials, RNTCP materials, perf reports, quarterly/annual/bi-annual reports of performance and its dissemination	• Budget for printing at State & District level would be as per printing plan(to be prepared and submitted along with PIP) • Printing to be planned as per the need and recent updates in programme strategies
14. Research & Studies & Consultancy	
There are certain studies like disease burden studies including prevalence surveys, mortality surveys, inventory studies, ARTI surveys, social assessment studies, IEC impact assessment studies, and drug resistance surveillance studies which will be undertaken by CTD and Central Institutes or appropriate agencies/institutes. Additionally operational research proposals on identified priority areas will be invited from State level and from the Medical Colleges. Capacity building programmes for Operation Research for stakeholders to be carried out. National Operational Research cell supported by HR as mentioned in contractual salary head. Proposals approved by State level OR committee/ Zonal level OR committee/ Central TB Division/National OR cell to be funded. Consultancy charges for procurement of drugs, lab testing charges for drug quality assurance, agency fees for advocacy/media management campaigns, consultancy cost for agency developing web based DOTS plus recording and reporting software, MIS system with web based case based reporting system.	The priority areas for operations research and format for proposals are given in the website www.tbcindia.gov.in . The research may be initiated at district, states or medical colleges. Proposed studies and their estimated costs may be included in the Annual Action Plans. • Research proposals up to Rs.2 lakh may be approved by State OR Committee. • Proposals up to Rs.5 lakhs may be approved by the ZTF(for medical reasons) • Proposal above Rs.5 lakh will be forwarded to CTD and put up to the National OR Committee for review and recommendation for approval to CTD
15. Procurement of Drugs	
Drugs required during TB treatment are being procured centrally. They are not to be procured at the State and Districts level except with written approval from CTD.	Procurement of drugs will be done from the Centre as per the appropriate financial guidelines Procurement of drugs from the State will be done only in case of permission from Central Tb Division after following appropriate financial guidelines.

16. Procurement of Vehicles	
New Four Vehicles: All districts are expected to hire four wheeler except where procurement of four wheeler has been specifically approved in writing for hilly/tribal/difficult districts or in special extra ordinary situations. These are to be procured following General Financial Rules 2017. Two Wheelers: 1 Two wheeler vehicle for mobility for each STS,STLS,DOTS plus & TBHIV Supervisor, PPM Coordinator • Replacement: Replacement of four wheeler vehicles will be permitted for notified tribal and hilly/difficult districts. Purchase of new four wheeler vehicles will be done in consultation with CTD. Vehicles due for replacement should have completed 6.5 years or 150,000kms whichever is later. • Replacement for 2 wheelers may be allowed if they have completed 6 years or 100,000 kms whichever is later. Condemnation rules of State Government will be followed, where applicable.	Vehicle procurement to be done at a tendered rate or State or NHM norms prevailing in the State.
17. Procurement of Equipment	
Lab Equipment: Binocular Microscopes & Fluorescent LED based microscope are being provided by CTD for training institution and for service delivery in RNTCP areas. • Culture and Sensitivity Equipment: Wil be Procured by CTD, wherever approved. • Office Equipment: Office equipment will be procured by States/districts for new units planned under the project (State TB cell, DTC, SDS, IRL and DRTB Centre) and for replacing them which are more than 5-7 years old and are not functional. Condemnation rules of State/Local self-Government to be followed. Every district will be provided with photo-copier, if not already available. Computer system with internet, Fax machine for every DTC, IRL, Culture DST laboratory, SDS, STDC, DRTB Centre(DOTS plus site), NRLs, and all STCs. STCs will have computer systems for Type A will have 3, STCs Type B will have 2 and Type C will have 1. Similarly bigger districts DTC Type A will have 2, while Type B & C will have system. States with 15 or more medical colleges to have provision of one computer system for	• As per the market rate, State/NHM fixed rates of procurement equipment, tendered rates and to be procured following General Financials Rules 2017

Lab Equipment: Binocular Microscopes & Fluorescent LED based microscope are being provided by CTD for training institution and for service delivery in RNTCP areas. • Culture and Sensitivity Equipment: Wil be Procured by CTD, wherever approved. • Office Equipment: Office equipment will be procured by States/districts for new units planned under the project (State TB cell, DTC, SDS, IRL and DRTB Centre) and for replacing them which are more than 5-7 years old and are not functional. Condemnation rules of State/Local self-Government to be followed. Every district will be provided with photo-copier, if not already available. Computer system with internet, Fax machine for every DTC, IRL, Culture DST laboratory, SDS, STDC, DRTB Centre(DOTS plus site), NRLs, and all STCs. STCs will	
18. Patient support & transportation charges:	
Tribal /Hilly/Difficult areas: All TB Patients in tribal/hilly/difficult areas to be provided cover to be travel costs of patient and attendant. **Nutrition Support:** Financial incentive to TB patient through DBT for Nutritional support, to prevent catastrophic expenditure and Incentivize treatment adherence. The States/UTs may provide this incentive to the notified patients either in cash through Aadhar linked DBT mechanism or in-kind. **Sample transportation (for diagnosis or follow up of drug sensitive or drug resistance TB patients):** Sample transportation from non-DMC PHI to DMC or DTC/DMC/Collection centre to Molecular lab (CBNAAT)/ Culture & DST lab by non-salaried Treatment supporter/community volunteers/Govt staff without provision of TA/Patient attendant/courier agency within the pre-decided time limit. Travel cost to Presumptive TB or DR TB patients travel to DTC/Collection centres for Culture/DST or molecular test (for diagnosis or for follow up): Presumptive travel to DTC/Collection centre to be paid as per the actual with public transport. It includes patient travel for follow up also. **Travel cost to Drug resistant TB patients:** DR TB patient traveling to District or Nodal DRTB Centre or to district for initiation/follow-ups/adverse reaction management during the treatment along with once accompanying person/attendant. Travel cost to be reimbursed as per actuals maximum up to equivalent of travel cost which public transport or norms approved by society for such visits to be provided.	**Tribal /Hilly/Difficult areas:** Patients from tribal /hilly/difficult areas to be provided an aggregate amount of Rs.750 to cover travel costs of patients and attendants. Nutrition Support at an average of Rs.500 per month till completion of treatment Sample Collection and transport (for diagnosis or follow up of drug sensitive or drug resistance TB patients): Through volunteer or Govt. Staff- As per actual cost per visit through public transport (Within district, up to Rs.400 per visit; Outside district up to Rs.1000 per visit) or norms approved by the State Health Society for such activity. Through courier/post- As per actual cost of post/courier Travel cost to Presumptive or DR TB patients travel to DTC/Collection centres for Culture/DST or molecular test: to be paid as per the actual with public transport or maximum up to norms approved by the State Health Society for such visit. Travel cost to DR-TB patient to District DR-TB Centre or Nodal TB Centre (for diagnosis or follow ups): As per actual cost per visit through public transport (Within district up to Rs.400 per visit; Outside district up to Rs.1000 per visit) or norms approved by the State Health Society for such visit.z

<table>
<tr><td>Patient support for investigation will be reimbursed for tests which are not available in government hospital and on priority approval.
ICT based Treatment Adherence Support:
This may include cost of software solution, recurring cost of communication (SMS, call), printing (sleeves) and supply chain.</td><td></td></tr>
<tr><td colspan="2">19. Supervision & Monitoring</td></tr>
<tr><td>Activities including component of supervision, monitoring, evaluations, appraisals, review meetings
Includes cost of TA/DA (except for training) for STOs, STDC staff, IRL Microbiologist, DTOs, MO-TC and all RNTCP contractual staff.
Internal Evaluations: All districts to be covered at least once in 3-4 years and All states to be covered under CIE at least once in 3 years.
Norms for SIE:
<table><tr><td>Population in million</td><td>Districts per quarter</td></tr><tr><td>Up to 30</td><td>2</td></tr><tr><td>>30 to 70</td><td>3</td></tr><tr><td>>70</td><td>4</td></tr></table>
Call Centre with TOLL FREE number to be established for patient management and awareness. Data cost, call centre executives and client relationship management (CRM) software and communication costs to be managed from centre support.</td><td>Central/ State level IE: Mobility support, Refreshment cost, external member residential accommodation, material cost etc. to be budgeted
Local hiring of vehicles for mobility support, refreshment costs, accommodation, TA/DA would be as per approved norms mentioned in training head or as approved by NHM/State.
Only costs not covered by State/Districts budgets will be provided under RNTCP.</td></tr>
</table>

Annexure 3

Annexure

Format for preparation of District Annual Action Plan

ANNUAL ACTION PLAN FOR PROGRAMME PERFORMANCE & BUDGET FOR THE YEAR

1ST APRIL 20____TO 31ST MARCH 20_____

District _____ State _____

This action plan and budget have been approved by the DHS (District health society).

Signature of the DTO _____

*Name*_____ *Designation*_____

Section-A – General Information about the District

1	Population (in lakh) please give projected population 20 _____	
2	Urban population	
3	Tribal population	
4	Hilly population	
5	Any other known groups of special population for specific interventions (e.g. nomadic, migrant, industrial workers, urban slums)	

(These population statistics may be obtained from Census data / District Statistical Office)

ORGANIZATION OF SERVICES IN THE DISTRICT:

Does the district have a DTC_____Y/N

Sl. No.	Name of the TU	Population (in Lakhs)	Please indicate if the TU is		No. of DMCs		
			Govt	NGO	Govt	NGO	Private
1							
2							
3							
4							
5							
6							
7							
8							
9							
	DISTRICT						

NTEP performance indicators:

Important: Please give the performance for the last 4 quarters i.e. July_to June ____

TB Unit	Total number of patients put on treatment	Total case notification rate (per lakh pop)	No of new smear positive cases put on treatment	New smear positive case notification rate (per lakh pop)	Cure rate for cases detected in the last 4 corresponding quarters	Plan for the next year		Proportion of TB patients tested for HIV	No. of MDR cases put on treatment
						NSP Notification rate (per lakh pop) & CDR (%)	Cure rate		

Section B – List Priority areas for achieving the objectives planned:

S.No.	Priority areas	Activity planned under each priority area

Section C – Plan for Performance and Expenditure under each head:

Civil Works / Maintenance

Activity	**Number required as per the norms in the district**	**Number actually present in the district**	**Number planned for this year**	**Please provide justification if an increase is planned (use separate sheet if required)**	**Estimated Expenditure on the activity**	**Quarter in which the planned activity expected to be completed**
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
DTC						
TUs						
DMCs						
				Total		

Laboratory Materials

Activity	***Amount permissible as per the norms in the district***	***Amount actually spent in the last 4 quarters***	***Procurement planned during the current financial year (in Rupees)***	***Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)***	***Justification/ Remarks for (d)***
	(a)	*(b)*	*(c)*	*(d)*	*(e)*
Purchase of Lab Materials					

Honorarium

Activity		Amount permissible as per the norms in the district	Amount actually spent in the last 4 quarters	Expenditure (in Rs) planned for current financial year	Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)	Justification/ Remarks for (d)
		(a)	*(b)*	*(c)*	*(d)*	*(e)*
Honorarium for Treatment Supporters (both tribal and non-tribal districts)						
Honorarium for Treatment Supporters of DRTB patients	*IP*					
	CP					

Annual Action Plan Format Advocacy, Communication and Social Mobilization (ACSM) for RNTCP

1) Information on previous year's Annual Action Plan
   a) Budget proposed in last Annual Action Plan: .....
   b) Amount released by the state: .....
   c) Amount Spent by the district- .....
2) Permissible budget as per norm: .....

Budget for next financial year for the district as per action plan detailed below:

Program Challenges to be tackled by ACSM during 20 ___	**WHY** **ACSM Objective**	**For WHOM Target Audience**	**WHAT ACSM Activities**		**When time Frame**				**By WHOM**	**Monitoring and Evaluation**		**Budget**
Based on existing TB indicators and analysis of communication challenges *(Maximum 3 Challenges)*	Objectives should be **SMART:** **S**pecific, **M**easurable, **A**chievable, **R**ealistic & **T**ime bound objectives		Activities	Media/ Material Required	Q 1	Q 2	Q 3	Q 4	Key implementer and RNTCP officer responsible for supervision	Outputs: Evidence that the activities have been done	Outcomes: Evidence that it has been effective	Total expenditure for the activity during the financial year
Challenge 1.												
Advocacy Activities												
Communication Activities												
Social Mobilization activities												
Challenge 2:												
Advocacy Activities												
Communication Activities												
Social Mobilization												
Challenge 3: -												
Advocacy activities												
Communication activities												
Social Mobilization Activities												
											TOTAL BUDGET	

Comments, if any: -

Prepared by: -

Equipment Maintenance:

Item	Numberactuallypresent in the district	Amount actually spent in the last 4 quarters	Amount Proposed for Maintenance during current financial yr.	Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)	Justification/ Remarks for (d)
	(a)	*(b)*	*(c)*	*(d)*	*(e)*
Office Equipment (Maintenance includes computer software and hardware upgradation, repairs of photocopier, fax, etc)					
Binocular Microscopes (RNTCP)					
			Total		

Training:

Activity	Number in the district	Number. already trained in RNTCP	Number planned to be trained in RNTCP during each quarter of next FY (c)				Expenditure (in Rs) planned for current financial year	Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)	Justification/ remarks
	(a)	(b)	Q1	Q2	Q3	Q4	(d)	(e)	(f)
Training of MOs									
Training of LTs of DMCs- Govt + Non Govt									
Training of MPWs									
Training of MPHS, pharmacists, nursing staff, BEO etc									
Training of Community Volunteers (CV)									
Training of Private Practitioners									
Other trainings #									
Re- training of MOs									
Re- Training of LTs of DMCs									
Re- Training of MPWs									
Re- Training of MPHS									
Re- Training of Pharmacists									
Re- Training of nursing staff, BEO									
Re- Training of CVs									
Re-training of Pvt Practitioners									
TB/HIV Training of MOs									
TB/HIV Training of STLS, LTs , MPWs, MPHS, Nursing Staff, Community Volunteers etc									
TB/HIV Training of STS									
Training of MOs and key staffs in Programmatic management of Drug resistant TB									
Update Training at various levels (key staff & MO-PHIs)									
Update training of Paramedical and other staff (PMDT)									
Any other training activity (Key staff & MO-PHIs)									

Please specify

Vehicle Maintenance:

Type of Vehicle	**Number permissible as per the norms in the district**	**Number actually present**	**Amount spent on POL and Maintenance in the previous 4 quarters**	**Expenditure (in Rs) planned for current financial year**	**Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)**	**Justification / remarks**
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Four Wheelers						
Two Wheelers						
				Total		

Vehicle Hiring:

Hiring of Four-Wheeler	**Number permissible as per the norms in the district**	**Number actually present**	**Amount spent in the previous 4 quarters**	**Expenditure (in Rs) planned for current financial year**	**Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)**	**Justification/ remarks**
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
For DTO						
For MO-TC						

NGO/ PP Support: (New schemes w.e.f. 01-10-2008)

Activity	Number. of NGOs currently involved in RNTCP in the district	Additional enrolment planned for this year	Amount spent in the previous 4 quarters	Expenditure (in Rs) planned for current financial year	Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)	Justification/ remarks
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
ACSM Scheme: TB advocacy, communication, and social mobilization						
SC Scheme: Sputum Collection Centre/s						
Transport Scheme: Sputum Pick-Up and Transport Service						
DMC Scheme: Designated Microscopy Cum Treatment Centre (A & B)						
LT Scheme: Strengthening RNTCP diagnostic services						
Culture and DST Scheme: Providing Quality Assured Culture and Drug Susceptibility Testing Services						
Adherence scheme: Promoting treatment adherence						
Slum Scheme: Improving TB control in Urban Slums						
Tuberculosis Unit Model						
TB-HIV Scheme: Delivering TB-HIV interventions to high HIV Risk groups (HRGs)						
				TOTAL		

Miscellaneous:

Activity*	Amount permissible as per the norms in the district	Amount spent in the previous 4 quarters	Expenditure (in Rs) planned for current financial year	Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)	Justification/ remarks
	(a)	*(b)*	*(c)*	*(d)*	*(e)*
			Total		

* *Please mention the main activities proposed to be met out through this head*

Contractual Services:

Activity	**Number required as per the norms in the district**	**Number actually, present in the district**	**Number planned to be additionally hired during this year**	**Amount spent in the previous 4 quarters**	**Expenditure (in Rs) planned for current financial year**	**Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)**	**Justification/ remarks**
	(a)	*(b)*	*(c)*		*(d)*	*(e)*	
Medical Officer-DTC		-	-		-	-	
STS							
STLS							
TBHV							
DEO							
Accountant – part time							
Contractual Driver							
Contractual LT							
Senior TBHIV-DOTSPLUS Supervisor							
					Total		

Printing:

Activity	Amount permissible as per the norms in the district	Amount spent in the previous 4 quarters	Expenditure (in Rs) planned for current financial year	Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)	Justification/ remarks
	(a)	*(b)*	*(c)*	*(d)*	*(e)*
*Printing**					

* *Please specify items to be printed*

Research and Studies:

Any Operational Research project planned (Yes) / (No)

Estimated Budget (to be approved by SHS)._____

Medical Colleges

Activity	***Amount permissible as per norms***	***Estimated Expenditure for the next financial year (Rs.)***	***Justification/ remarks***
	(a)	*(b)*	*(c)*
Contractual Staff: *MO (In place: Yes/No) STLS (In place: Yes/No) LT (In place: Yes/No) TBHV (In place: Yes/No)*			
Research and Studies: Thesis of PG Student Operational Research*			
Travel Expenses for attending STF/ZTF meetings			
IEC: Meetings and CME planned			
	TOTAL		

Procurement of Vehicles:

Vehicles	***Number actually present in the district***	***Number planned for this year***	***Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)***	***Justification / remarks***
	(a)	*(b)*	*(c)*	*(d)*
4-wheeler **				
2-wheeler				

** Only if authorized in writing by the Central TB Division

Equipment	***Number actually present in the district***	***Number planned for this year***	***Estimated Expenditure for the next financial year for which plan is being submitted (Rs.)***	***Justification/ remarks***
	(a)	*(b)*	*(c)*	*(d)*
Office Equipment (computer, modem, scanner, printer, UPS etc)				
Any Other				

Section D: Summary of proposed budget for the district –

S.No.	Category of Expenditure	Budget estimate for the coming FY 20____ *(To be based on the planned activities and expenditure in Section C)*
1	Civil works	
2	Laboratory materials	
3	Honorarium	
4	ACSM	
5	Equipment maintenance	
6	Training	
7	Vehicle maintenance	
8	Vehicle hiring	
9	NGO/PP support	
10	Miscellaneous	
11	Contractual services	
12	Printing	
13	Research and studies	
14	Medical Colleges	
15	Procurement –vehicles	
16	Procurement – equipment	
	TOTAL	

** *Only if authorized in writing by the Central TB Division*

Annexure 4

Financial Management Checklist for Central Internal Evaluation

Name of Society visited : .....
Date of Visit : .....
Name & Designation of Reviewer: .....

PART-I

(To be completed by Officials/RNTCP Consultants evaluating STCs/DTCs)

Sl. No	Description	Yes	No	Remarks
1	Whether Cash Book and Bank Book written up to date (indicate date)			
2	Whether entries in Cash/Bank book have been authenticated by STO/DTO (indicate date)			
3	Whether Cash balance as per Cash Book reconciles with physical cash in hand			
4	Whether Bank Reconciliation Statements are made on periodic basis			
5	Whether General Ledger is written up to date (all the heads) Indicate the date up to which entries have been posted			
6	Whether bank reconciliation has been done at the end of the previous month			
7	Whether all vouchers are serially numbered and filed properly			
8	Whether Fixed Assets Register is up to date and entries authenticated by STO/DTO			
9	Whether Stock Register for consumables, drugs and printed materials is up to date			
10	Whether advances are classified separately and not included in the SOE. (Only on receipt of Utilization certificate /contractors' bills, advances are adjusted and value included in the SOE)			
11	Whether there is a backlog of SOE			
	Whether backup of financial data is maintained			
12	Whether there is a backlog of Audit Report and Utilization Certificate			
13	Whether there are any fund flow delays to the STC/ DTCs			

Sl. No	Description	Yes	No	Remarks
14	Whether any pre-signed blank cheques found			
15	Whether Petty Cash Book is being maintained by the STC/DTC			
16	Whether the amount of Imprest Money/Permanent Advance/ Petty Cash has been fixed as per relevant rules			
17	Whether Register of Advances is being maintained and expenditure thereof is included in the SOE only on receipt of adjustment bills/UC from the party concerned.			
18	Whether any advance is outstanding for more than six months, and if so, the position has been brought to the notice of the Chairman.			
19	Whether the bank balance including advances paid/ received and bank interest earned tally with the SOE balance			
20	Whether separate S.B. account in respect of TB Control Programme has been opened			
21	Whether tax is being deducted at source in respect of contractual payments, including contractual remuneration, as per provisions of IT Act			
22	Whether physical verification of assets is being carried out at least once a year. Indicate the date when such verification was done last (.....)			
23	Whether the SOE due for the latest quarter in respect of DTC/ STC has been prepared and sent to STC/CTD			
24	Whether Consolidated SOE in respect of the State as a whole (STC + all DTCs) for the latest quarter ending ..... has been sent to CTD			
25	Whether the Audit report & UC in respect of the STC/DTC for the previous year ending ..... due on ..... has been sent to CTD/STC			
26	Whether Consolidated Audit Report & UC in respect of the State as a whole (STC + all DTCs) for the previous year ending ..... due on ..... has been sent to CTD			

Sl. No	Description	Yes	No	Remarks
27	Whether Financial Management Check list is being furnished on a quarterly basis by STC to CTD and by DTC to STC			
28	Whether demand by DTO for reallocation of funds is being looked into by the STC at the earliest possible time and action taken.			
29	Whether STO has retained excess funds with him while any of the DTCs is/are short of funds. If so , STO to indicate the likely date (.....) by which funds are being released to the DTC(s)			
30	Whether Annual Action Plan and budget requirement (by DTC) /consolidated Annual Action Plan and budget requirement (by STC) has been prepared and sent to STC/CTD in time. Indicate the year for and date on which last sent.....			
31	Whether laid down procedures for procurement are being followed			
32	Whether the State Accounts Officer/Accountant visits the DTCs and examines the books of accounts			

Signature of Reviewer

Part II

(To be completed by Officers/RNTCP Consultants carrying out Central Level Internal Evaluation at State level, in addition to completing Part I)

Financial Management Checklist for State Level (Central Level Internal) Evaluation

1. For Receipt of funds

a	Time taken for deposit of cheque on receipt	
b	In case funds are routed through NHM, the total time taken for receipt of funds by STC from CTD / by DTC from STC	

2 Disbursement of funds (for STCs only)

a	System being followed at STC for disbursement of funds	
b	Time taken and adequacy of amount sent to Districts – good points and problem areas	
c	Inter-district transfer of funds by STC	
d	Reallocation process-system being followed and time taken at STC	

3 Utilization of funds

a	Action Plan/Budget – timely submission, comparison with actual, deviations and reasons thereof	
b	Remedial steps taken/additional activities being undertaken	
c	Item heads being centralized by State for procurement/expenditure, e.g., printing, lab consumables, IEC, vehicles, equipments etc. comments, if any.	

4. Financial Management Reports.

a	SOE – preparation and timely dispatch. Reasons for delay. Action taken.	
b	Knowledge of Financial Management Guidelines, Norms, Procurement Manual etc. Any State norms for procurement applied?	
c	Whether Maintenance of Books of Accounts and Records is at satisfactory level	
d	Whether qualified staff is in place in STC/DTC	
e	Whether training of STC/DTC Accountants conducted during last one year	

f	Supervisory visit by STO/State Accountant to DTCs during last one year. (Inspect check list of financial Management – observations made therein.)	
g	Comments on utilization of funds – head-wise in proportion to the planned budget – obtain three years utilization figures.	
h	Plans for optimum utilization of funds in the remaining quarters of the current year.	
i	Receipts & Utilization of funds from other sources, if any.	
j	Whether backup of data maintained	

5. Financial Management – General issues.

a	Whether Delegation of financial powers in the Society for approval of Action Plan and imprest money expenditure has been made.	
b	No. of meetings of the Governing Body and General body during last one year – records of Minutes	
c	Delay, if any, in payment of Contractual Remuneration/vehicle maintenance/vehicle hiring etc. Reasons thereof	
d	Advances outstanding for more than 6 months. Whether such instances are brought to the notice of Chairman for taking appropriate action.	
e	Loans , regularity and source	
f	Losses and frauds, if any, noticed	

6 Audit.

a	Examine Audit Report for last three years	
b	Audit Observations & status	
c	System of appointment of Auditors	
d	Status of audit for current year	

7. Opinion/Recommendations

a	Good points	
b	Areas where improvement noticed	
c	Areas which need improvement	
d	Comments on capacity building	
e	ATR submissions; timely or delayed or not submitted	

Signature of Reviewer

GFR 12-A

[{See Rule 238 {1}]

FORM OF UTILIZATION CERTIFICATE
FOR AUTONOMOUS BODIES OF THE GRANTEE ORGANIZATION

UTILIZATION CERTIFICATE FOR THE YEAR ..... in respect of recurring / non-recurring

GRANTS – IN- AID / SALARIE / CRETATION OF CAPITAL ASSETS

1. Name of the scheme.....
2. Whether recurring or non –recurring grants.....
3. Grants position at the beginning of the Financial year
   (i) Cash in Hand/bank
   (ii) Unadjusted advances
   (iii) Total
4. Details of grants received, expenditure incurred and closing balances (Actuals)

Unspent balances of grants received year [figure as at Sl.No. 3(iii)]	Interest earned thereon	Interest dipositive back to the Government	Grant received during the year			Total available funds (1+2-3+4)	Expenditure incurred	Closing Balances (5-6)
1	2	3	4			5	6	7
			Sanction No. (i)	Date (ii)	Amount (iii)			

Component wise utilization of grants:

Grant-in-aid-General	Grant-in-aid-salary	Grant-in-aid-creation of capital assets	Total

Details of grants position of the end of the year
(i) Cash in Hand / Bank
(ii) Unadjusted Advances
(iii) Total

Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled / are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

(i) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements / accounts

(ii) There exist internal controls for safeguarding public funds / assets, watching outcomes and achievements of physical; targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.

(iii) To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines

(iv) The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.

(v) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.

(vi) The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and condition of the grant-in-aid.

(vii) It has been ensured that the physical and financial performance under .....[name of scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance / targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure -1 duly enclosed.

(viii) The utilization of the fund resulted in outcome given at Annexure – II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements / specifications)

(ix) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure – II (to be formulated by the Ministry / Department concerned as per their requirements / specifications.

Place:

Date:

Signature

Name.....

Chief Finance Officer
(Head of the Finance)

Signature

Name.....

Head of the organization

(Strike out inapplicable terms)

GFR 12 – C

[(See Rule 239)]

FORM OF UTILIZATION CERTIFICATE (FOR STATE GOVERNMENTS)
(Where expenditure incurred by Govt. bodies only)

Sl. No.	Letter No. and date	Amount	Certified that out of Rs.....Of grants sanctioned during the year.....in favour of .....under the Ministry/Department Letter No. given in the margin and Rs.....on account of unspent balance of the previous year, a sum of Rs.....has been utilized for the propose of .....for which it was sanctioned and that the balance of Rs.....remaining unutilized at the end of the year has been surrendered to Government (vide No. .....dated.....)/will be adjusted towards the grants payable during the next year.....
	Total		

2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the propose for which it was sanctioned.

Kinds of checks exercised

1.
2.
3.
4.
5.

Signature.....
Designation.....
Date.....

PS: The UC shall disclose separately the actual expenditure incurred and loans and advances given to suppliers of stores and assets, to construction agencies and like in accordance with scheme guidelines and in furtherance to the scheme objectives, which do not constitute expenditure at the stage. These shall be treated as utilized grants but allowed to be carried forward.

/

Notes