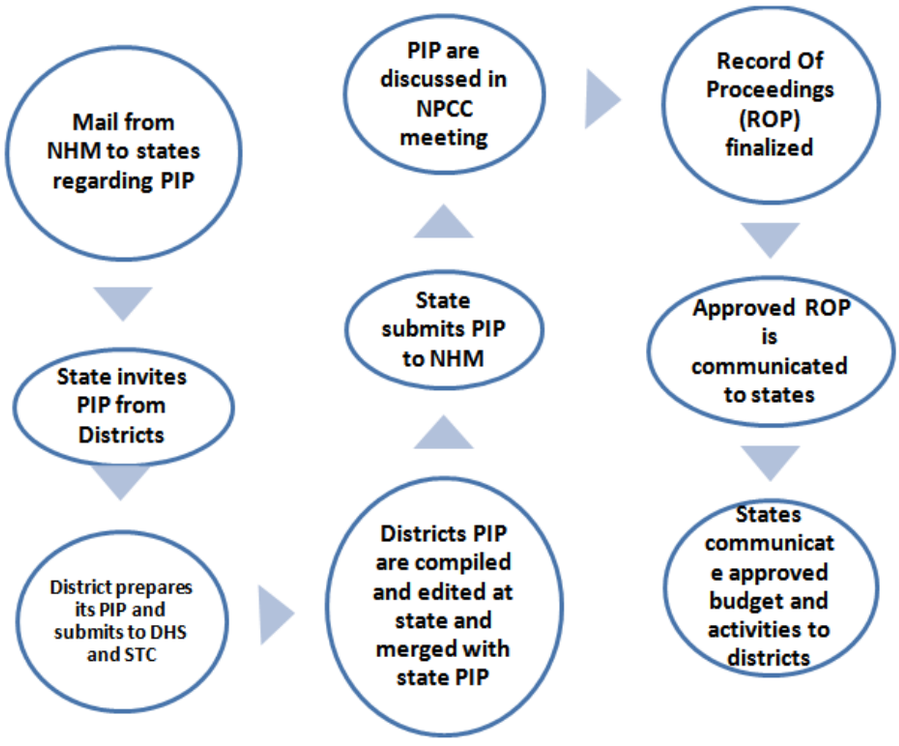
Project Implementation Plan & Planning process

RNTCP is one of the components under the National Health Mission (NHM) which is a flagship scheme under Government of India. Financial support to RNTCP is provided through NHM. The MoHFW follows equity-based approach to allocate funds under RNTCP to various States. The overall allocation is made on the basis of population and burden of disease in the states.

As a part of NHM; RNTCP also follows a Bottom Up approach for planning and budgeting. The process begins at the districts level, which prepares the "District Health Action Plan(DHAP)" based on inputs from all stakeholders in the districts. The RNTCP district PIP at district level will be formed by District TB Centre (DTC). These Districts Health Action Plans are then aggregated to form an "Integrated District Health Action Plan (IDHAP)" which is further sent to the State Level. The DHAPs of all districts are compiled and aggregated at the state level for framing the "State Program Implementation Plan (SPIP). All SPIPs are reviewed and compiled to estimate the next year's fund requirements for programme implementation activities under NHM/RNTCP. Under RNTCP State TB Cell is having a mandate to prepare a plan of action. The PIP should indicate the physical targets and budgetary estimates in accordance with the approved pattern of assistance under the NHM. These should cover all aspects of the programme activities for the period from April to March each year, and are sent by each State/ UT to the Ministry of Health & Family Welfare, GoI for approval well before the start of the year. The State TB Cell is expected to submit its PIP through State NHM to MoHFW, GoI. It is important that the action plan is realistic, practically implementable and correlates the physical outputs with the cost estimates.

The State PIP is approved by the Union Secretary of Health & Family Welfare as Chairman of the EPC, based on appraisal by the National Programme Coordination Committee (NPCC), which is chaired by the Mission Director and includes representatives of the state, Technical and Programme divisions of the MoHFW, National Technical Assistance agencies providing support to the respective states, other departments of the MoHFW and other Ministries as appropriate

Process of PIP



The salient features of RNTCP PIP process are following

1. The PIP under RNTCP is part of National Health Mission PIP under the Disease control program Flexi-pool.
2. The PIP process for the FY will be initiated by mail sent by National Health Mission , MoHFW, GoI
3. The unit for district PIP under RNTCP will be District TB Centre (DTC). The PIP of DTC should include activities and budgetary requirements of DTC, TB Units, Laboratories, DRTB centre, Partnerships (NGO, PP, Corporate sector etc.), Medical colleges.
4. The district PIP of RNTCP needs to be submitted at two place a) State TB cell and b) Districts Health Society/ DPMU. The RNTCP districts PIP must be included in District Health Action Plan (DHAP) of NHM.
5. The State PIP must include PIP of all districts and activities and budgetary requirements of all state level RNTCP institutions.
6. PIP must include the physical targets for state to be achieved in that FY.
7. Any innovation that has been proposed in PIP should come with detailed proposal.
8. PIP must include detailed proposal of the Human resources including the existing HR and new HR required under program.
9. The approved ROP will include central and state share.It includes approved cash as well as commodity component.
10. The state share may change from time to time as per guidelines issued by NHM, MoHFW, GoI
11. From 2016-17, PIP preparation and submission is software based. The process of submission will remain same. The URL of software is http://pip.nhm.gov.in. The user manual can be downloaded from this.

RNTCP TEMPLATES FOR PIP

Program division has detailed PIP template for both state and districts. The PIP templates are available on the programme website (www.tbcindia.gov.in). However states are expected to provide the detailed justification of the each budget lined requested under PIP.

Financial management

Under NHM, annual resource envelope of a State is decided based on its population, health lag and socio economic backwardness. Financing of RNTCP is managed through Central Domestic Support, State Government/UTs Share, Grants from The Global Fund, Credit from The World Bank and direct implementation through technical support from WHO, USAID, UNITAID, CF etc.

The States are required to adhere to NHM Operational Financial Management Guidelines strictly. The Financial Management Guidelines are applicable to all RNTCP entities (States, Districts, etc.) irrespective of the source of funds.

Key accounting policies and disclosures

a) Basis of Accounting – Cash Basis, to facilitate claim filing on paid expenditure basis.
b) Period of Accounting – On Financial year basis of GOI - i.e. 1st April to 31st March.
c) Method of Accounting: On double entry book keeping principles

Accounting Centers under RNTCP

The accounting centers are the offices where the basic accounting in respect of expenditure is carried out. These centers are responsible for maintaining the books of accounts, opening and operating bank accounts etc. The accounting centers for the project shall be Central TB Division (CTD), The State TB Cell (STC) and District TB Centres (DTC).

State Training cum Demonstration Centre (STDC), National Task Force (NTF), Zonal Task Force (ZTF), State Task Force (STF), TB Units (TUs), DMC, DR TB Centers etc. are not accounting centers

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

GIA release

Amount of GIA release by Center to States/UTs depends on following:
a) Approved Annual Action Plan and Budget;
b) Unspent balance available with the States/UTs;
c) Projected requirement;
d) Release of state share of preceding year; and
e) Pace of utilization of funds released earlier.

The Government of India (GoI) will release funds to the State Treasury on the basis of plan of action/ budget of the SHS and DHS. From the State Treasury, the funds are released to SHS. Based on the submission of SOEs (DHS and SHS), Utilization Certificates, audit reports by the SHS(RNTCP sub committee) and state share, funds are released in two to three installments by the GoI.

Payment Procedure

a) All payments exceeding Rs. 2500/- shall be made by way of a cheque/demand draft/bank transfer 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) Compensation package for the contractual staff will be decided by the respective State based on State specific situation, job contents, job responsibilities, compensation of similar positions in other programme under NHM. These compensation packages will be proposed by the respective State in the State PIP and got finalized through PIP appraisal mechanism in consultation with NRHM, Ministry of Health & Family Welfare.
f) The States are authorized for appropriation of expenditure in the subheads within overall ceding of budget approved. The DHS can appropriate the expenditure up to 15 % in the subhead at their own, however, re-appropriation beyond 15% shall be done with the approval of SHS.
g) To ensure that tax is deducted at source, wherever applicable, before making the payment.

No works shall be commenced or liability incurred until: -
a) administrative approval has been obtained;
b) sanction to incur expenditure has been obtained;
c) detailed design has been sanctioned;
d) estimates containing the detailed specifications and quantities of various items have been prepared and sanctioned;
e) funds are available;
f) tenders invited and processed;
g) a Work Order issued.

Books of Accounts

The following Books of Accounts are to be maintained at State/District level:

a) Cash Book: For recording transactions relating to the receipt and payment of cash and or from the banks as per specimen at Annexure VII of the Financial Management Guidelines (page 132)
b) General Ledger (Account head wise summary of the transactions): as per specimen in Annexure X of the Financial Management Guidelines (page 134)
c) Journal: for recording transactions/adjustment entries which do not involve the movement of funds, as per specimen at Annexure XI of the Financial Management Guidelines (page 134)
d) Format/Register for Bank Reconciliation: as per Annexure XVI of the Financial Management Guidelines (page 137)
e) Petty Cash Book : for record of receipt and payment from petty cash withdrawn from bank for meeting out the day to day and small expenses of the society, as per Annexure VIII of the Financial Management Guidelines (page 133)
f) Stock Registers: for consumable, printed material and for grant of drugs (Commodity grant)
g) Fixed Assets Register: as per format given at XV of Financial Management Guidelines (page 136)
h) Advances Register: as per format given at XII of Financial Management Guidelines (page 134)
i) Expenditure Control Register: containing approved Budget Estimates as per the Annual Plan and expenditure incurred under each head of account.
j) Record of Audit and Register of Settlement of Audit Objects,
k) Record of Utilization Certificates received from NGOs (pertaining to the Grant-in-aid given to any NGOs by the District or State Society

Financial Statements

Following financial statements are required to be submitted:

A. Statement of Expenditure on Quarterly basis,
B. Audited Statement of Accounts comprising:
    - I. Audited Receipt & Payment Account ,
    - II. Audited Income & Expenditure Account
    - III. Audited Balance Sheet.
    - IV. Audited Utilization Certificate
    - V. Audited Bank Reconciliation Statement
    - VI. Accounting Policy (as per the Financial Management Manual)
    - VII. Schedule of fixed assets
    - VIII. Schedule of outstanding advances recoverable/adjustable
    - IX. Schedule of Sundry debtors/creditors (if applicable)
    - X. Auditor's Report in the prescribed format
    - XI. Management Letter from the Auditors consisting of :-
        a. Comments/observations on accounting records/ systems/ controls.
        b. Deficiencies and areas of weakness in the system with recommendations for their improvement.
        c. Report on the degree of compliance with the financial/internal control procedures.
        d. Report on degree of compliance and deviation from the laid down procurement policies/procedures.
        e. Report on matters that have come to notice during audit which have a significant impact on the implementation of the project and also on any other matter which the auditor considers pertinent.
        f. Report on compliance with statutory requirements such as deduction of tax at source on contractual payments including remuneration paid to the contractual staff.

The Financial reporting requirements under RNTCP at various levels with time lines are placed at Annexure 19. The States are required to enter the transactions in Public Financial Management System (PFMS) and generate all reports from PFMS. The NHM in consultation with AG is likely to roll out all the modules of PFMS with effect from 1st April 2016.

Shortcomings/flaws noticed in general in the Utilization Certificate (UCs) which needs to be looked into by STOs/DTOs:

a) UC not furnished in the prescribed format as per the Guidelines
b) Bank interest, misc. receipts etc. not included in the receipt side of the UC.
c) No correlation between the expenditure indicated in Income & Expenditure Account plus increase or decrease in assets during the year and utilization indicated in UC.
d) Amount of sanction issued/released by Centre / State at the end of financial year but received in succeeding financial year not indicated in that year's UC
e) Sanction Nos. and dates through which the grant-in-aid is/was received during the year are not indicated in the UC.
f) UC not signed by the authorized signatories.

Shortcomings/flaws noticed in general in the Audited Statement of Accounts which needs to be looked into by STOs / DTOs:

a) Accounting method of "Accrual Basis" being adopted by many of the STCs/DTCs instead of the "Cash Basis" method laid down in the FM Guidelines.
b) Depreciation being charged on fixed assets by many Societies in spite of clear guidelines not to charge.
c) Auditors' Report in the prescribed format not attached to the AR.
d) Assets are being charged off by some Societies while being capitalized by others.
e) Reconciliation of expenditure figures as reported in the SOEs not done with the final A/R figures and reported to CTD.
f) One or more Part(s) of the Annual Statement of Accounts (Receipt & Payment A/c or Income & Expenditure A/c. or Balance Sheet) not included in the Audit Report.
g) Utilization Certificate not furnished along with the Audit Report.
h) Management letter from the Auditors on the internal control weakness and areas for improvement of the Societies not obtained from the Auditors and attached to the AR.
i) Wherever Management letters are attached, the replies/explanation/action taken on the points raised by the audit report not attached, duly vetted by the Auditors.
j) Financial Management Check-list in the prescribed format filled in and certified by the Auditors not attached to the Audit Report.
k) Monthly reconciliation of Bank Account not done.
l) Fixed Assets Register not maintained properly and physical verification done periodically.
m) Reasons for large cash balance at year end not explained.
n) The Note disclosing the basis of preparation of Financial Reports and significant accounting policies related to material items not added to the Audit Report.
o) Funds disbursed to DTCs shown as expenditure instead of showing separately as disbursements in the AR of STC
p) Funds spent by STC on behalf of DTCs not separately and distinctly shown in the Payment side of the R&P A/c. of STC.
q) Funds disbursed to DTCs shown on the payment side of Consolidated R&P A/c, whereas the same is not to be reflected in Consolidated R&P A/c.
r) Similarly funds received by DTCs shown wrongly on the receipt side of CR&P A/c.
s) Consolidated Schedule of Fixed Assets covering all DTCs and STC not attached to the Consolidated A/R.
t) Auditors' Report in the prescribed format not attached to the AR
u) The Note disclosing the basis of preparation of Financial Reports and significant accounting policies related to material items not added to the Audit Report.

The STOs/DTOs in the capacity of DDOs to conduct following essential checks:-

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 verified physically.
c) In respect of Government moneys paid into the bank, the relevant entry in the cash book should not be attested unless the bank's receipt on the challans is verified.
d) No money should be disbursed unless a legal aquittance from the person(s) entitled to receive the amount drawn on a bill is obtained.
e) An account of undisbursed Pay & Allowances should be kept in a register and the amounts remaining undisbursed for 3 months should be refunded.
f) For all moneys received, receipts in the prescribed form should be issued and it should be ensured that such receipts have duly been entered in the cash book.
g) All moneys received in cash or by cheques/Demand Drafts should be promptly paid into the bank or sent to the PAO, as the case may be.

h) Except where otherwise specifically provided, any loss or shortage of public money, stamps, stores or other properties caused by defalcation or otherwise should be immediately reported to the next higher authority as well as to the concerned Audit Officer.
i) No expenditure should be incurred without the sanction of the competent authority.
j) 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 years' grant.
k) No money should be drawn in anticipation of demand or to prevent lapse of budget grant.
l) Expenditure relating to two or more major heads should not be included in one bill and full account classification must be recorded on each bill.
m) Expenditure control register should be maintained to exercise an effective check over expenditure against the budget allotment.
n) T.A. claim not preferred within one year from the date on which it became due should be dealt with in accordance with the provisions of SR 194-A and the GoI Orders thereunder.
o) DDOs should pay by bank transfer/cheques only such claims (e.g. pay and allowances, office contingencies etc.) as they have been authorized to entertain.
p) The bills should be subjected to the prescribed checks enumerated in CGA (R&P) Rules/CAM before they are passed for payment.
q) All cheques should be drawn on forms in cheque books supplied by the Bank, and the instructions contained in the Central Government Account (Receipts & Payments) Rules.

Advocacy Communication and Social Mobilization

Advocacy, Communication and Social Mobilization (ACSM) are three distinct concepts that are most effective when used together. ACSM is an important component of the TB control strategy and is necessary to ensure long-term and sustained impact.

To achieve universal access to TB care, it is critical to design and implement issue-based, region and audience specific ACSM initiatives. These will in turn create demand for RNTCP services facilitating early diagnosis and treatment as well as treatment completion. Engagement and forging partnerships with multiple stakeholders including healthcare providers, corporates, NGOs, CBOs, other vibrant community groups, local self-governments etc. will result in improved provision of care for TB patients. Major components of the ACSM strategy are:

1. Advocacy for administrative and political commitment will keep TB control high on the health and development agenda. Policy advocacy informs politicians and administrators about how an issue affects the country, outlining actions 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 and will help keep TB high on political, administrative and the public agenda.

2. Communication aims to favourably change knowledge, attitudes and practices among various groups of people. Audience segmentation and targeted behaviour change interventions will be the key to success.

3. Social mobilization brings together community members and other stakeholders to strengthen community participation. Empowering community structures helps facilitates referrals, strengthens patient support, promotes treatment completion and reduces stigma. Increasingly, the term '**community engagement**' is being preferred over social mobilisation.

ACSM initiatives help -

- Increase demand for early diagnosis and treatment
- Improve referral for case detection and community support for case holding
- Combat stigma and discrimination, and empower people affected by TB
- Increase capacity of health providers and front line workers to deliver ACSM messages
- Mobilize political and administrative commitment, and enhanced resources for TB
- Increase ownership by the community
- Increase capacity for prioritizing TB in health planning at the grass root level of Panchayati Raj

ACSM Advisory Committee: To benefit from external expertise and to streamline the process in all aspects of ACSM activities for RNTCP, the programme has established a system of drawing support and guidance from experts from the centersof the excellence in the field of health communication, communication research, mass media, academia, capacity building, monitoring and supervision, field personnel and civil societies for infusion of new ideas. National ACSM Advisory Committee has been constituted at Central TB Division to support RNTCPs ACSM programme for providing technical support in implementation of ACSM activities.

Similarly, a State ACSM Quality Support Group (SAQSG) is formed at the State level with a Goal to ensure quality support to the entire ACSM effort as an ongoing mechanism for continued quality assurance for TB Control program.

Peer Level Support Group is to be formed for DTOs to seek clarifications with a comfort level and higher participation. Members of SAQSG should include DTOs, IECOs, CFs, Consultants and Partners. There should be 5-7Quality Coach (QC) per state.One QC to be designated as State Coordinator SAQSG. Each DTO will be attached to one QC. DTOs can be given a choice to opt for one of the QCs. However, no QC should have more than 8-10 districts. QCs will help their selected DTOs in improving quality of ACSM plans and activities in their area. Support is given by giving advice and suggestions, sharing good work and best practices from other districts/states, suggesting exposure for CFs (inter district or interstate) for actual field activity that ensures faster learning, sharing communication materials – specially the local performing arts communication.

Coordinator SAQSG to inform all DTOs/STO of specific best practices, success stories, special events and activities by the 5th of the next month. Coordinator SAQSG will also share this information with all neighboring states' Coordinators so that some innovative work gets used by others. Through STO this information will be shared with CTD on a monthly basis (by 7th of the next month).

ACSM Planning

- Under RNTCP, planning is decentralised to States and Districts for greater efficacy and ensuring that need-based initiatives are undertaken. Given India's vast geography, population size and socio-cultural milieu, it is critical to design and implement issue-based and audience specific interventions / activities. A language and a medium that works in one district may not be the best suited for another. Similarly, pamphlets, posters or wall painting may be read by a literate audience, but for others audio-visual media may work better. Each medium has its advantage and disadvantages and these may be selected based on the target group the initiative is being planned for. No single media reaches all and a combination of media will ensure wider outreach.
- The DTO with support from the District PPM Coordinator in consultation with all relevant cadres at the district level is responsible for the planning, development and implementation of the Annual ACSM Action Plan based on the needs and priorities of the district. The STO with support from State IEC/ACSM officer develops the State Annual Action Plan (SAAP).
- District teams must brainstorm and analyse district specific data from quarterly reports to identify issues and list priorities for a particular planning period.
- RNTCP seeks to generate awareness through a mass media campaign based on audience segmentation and an appropriate media mix to tackle a host of issues related to case detection, demand generation for TB services, treatment adherence as well as address concerns related to Drug Resistance, TB notification, private sector involvement, ban on commercial use of serological diagnostic tests, TB co-infections etc., as well as developing appropriate job aids to enable field staff in delivering their responsibilities more effectively. RNTCP surveillance data collated through Epicentre and Nikshayis used to guide the media planning exercise.

- **Resource mobilisation:** To supplement ACSM resources explore partnership options with NGOs, Community based organisations, Corporates available in the region etc. Integration with NHM, the General Health System, Government institutions, programmes etc. must be explored.

Strategic Approach

The most crucial aspect of planning would be to define the objective. ACSM strategies should be formulated to achieve these objectives.The communication plan should be based on the identified target groups.

Implementation of annual action plan

1. Annual action plan should have a calendar of activities - who will do what and when
2. Split activities – quarter/ month/ weekly
3. Assign work to staff
4. Utilize existing or develop new communication material as per need
5. Implement activities
6. Provide supervision and support to staff for implementation
7. Document / Report writing
8. Quarterly reporting of activities

Communication Materials

- Given the socio-cultural diversity of India, it is important to communicate to people in a language that they understand well. Hence, materials can be developed locally in appropriate regional languages and cultural context.
- Communication materials developed at the National-level have been shared with all States. State ACSM/IEC Officers can be contacted to facilitate access to existing communication materials.

Target Audience	Objective	Methodology	Tools/Materials
Advocacy			
Policymakers Administrators and program managers Elected representatives Media professionals Other influencers in society	Seek support in terms of supportive policies, greater resources	Meetings, discussions, sensitization workshops	Relevant fact sheet & data; background reading material; case studies; printed documents or PPTs with necessary information
Communication			
Public at large Cured patients Healthcare providers	Create awareness for improved case detection (this is just one communication objectives, these can vary based on target audience and what is expected from the interaction with them)	Mass media & Mid-media channels; Inter-personal Communication and face to face interactions	TV, Radio and Print advertisements; Posters, leaflets, booklets, pamphlets; wall writings & hoardings; Folk performances, street plays etc.; Flip charts and other Audio & Visual aids
SocialMobilization / Community Engagement			
Community Vulnerable populations such as slum dwellers, prisoners, mine workers etc. Youth	Awareness and motivate them to support specific action	Group meetings with more specific targeted information and interaction to address participants' concerns	Audio-visual aids, posters, banners, charts etc.

Guidelines to conduct Community meeting, patient provider meeting, school health activities, sensitization of PRI/AHSA and Outdoor publicity (including World TB Day observation) are placed at annexure 20. For detailed guidelines and further clarification may refer to Operational Handbook on ACSM available at www.tbcindia.gov.in

Partnerships

Synergistic efforts of all stakeholders involved in TB control in India are the key towards realising the goal of "Universal access to TB care and treatment for all". Revised National TB Control Programme is working towards this goal with the basic philosophy that government is not the sole provider of services for TB and optimum efforts should be made to utilise the resources in the private sector. In this context an enabling environment should be created through regular interaction with partners involved in TB control and promoting innovative TB control initiatives at district, state and national level.

Definition

Partnership means an arrangement between any two or more entities; 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 RNTCP which entailed strategies that link all entities within the private and public sectors (including health providers in other governmental ministries) to the national TB programme for DOTS expansion'.
Involvement of all health care providers is necessary to achieve Universal access to TB care.

Health care providers in India

Ministry of Health	Other Ministries	Non-Government
Directorate of Health (RNTCP, Primary health care) Directorate of Medical Education (Medical Colleges)	Railways Employees State Insurance (ESI) Mining Coal Steel Ports Prisons Armed Forces	NGO Private hospitals Corporate industries Private practitioners Traditional practitioners (AYUSH)

There are large number of health facilities run by public sector other than Ministry of Health & Family Welfare under different ministries of centre / state governments as mentioned above. There are corporate sector companies in the public sector like Coal India, SAIL etc. which run their own set ups. Usually these facilities cater to a "captive population" who receive subsidized or free services from said facilities. Additionally ministries like defence, railways, home ministry etc. have their own medical services set up and they have been involved at various levels under the RNTCP. The program had already involved ESI, NTPC, Railways, CGHS, Coal, Prisons, Armed Forces, Mines and Port. Further there are also health services offered by ITBP, BSF, CRPF, Assam Rifles, CISF and Ministry of Home, apart from some local initiatives to involve these institutions.

There is integration of service delivery and reporting at the TU and district level with most of the partners delivering health care through their own set up.

RNTCP has formed the National Technical Working Group on Public Private Mix to provide a forum for dialogue, to ensure sustained attention on the issue, and guide innovation and learning. The group provides guidance on technical aspects such as the inclusion of all internationally accepted regimens, guidance on the scope and geographic distribution of initial projects, and policy requirements for improved PPM.Institutional mechanisms to support the States for effective contract management, hiring interface agencies to manage activities of engaging private sector and other partnership-strengthening functions need to be developed.

RNTCP has proactively sought the involvement of NGOs in TB control activities.Using the experiences gained from collaborations with NGOs and the private sector, the Central TB Division has brought out the National Guideline for Partnership 2014 for engagement with all stakeholders. However, RNTCP does not restrict to these guidelines alone and rather promote innovation for reaching the goal of universal access to TB care. One example is flexibility as mentioned below.

Flexibility in budget for Partnership

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.

Process of Partnership

Before going into detail of each partnership option we need to understand the processes involved in partnership formation which is crucial for the work of PPM Coordinators and Program Managers at district and state level. The processes involved in partnership are:

- The PPP strategy is for reaching the unreached and also to reach patients even if they are accessing private / other sector as **RNTCP in this case would act as an enabler and not provider of services**
- Undertake assessment of gaps in health service delivery in RNTCP 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.
- NGOs and other partners must be involved for supplementing capacities in some key areas where the formal health delivery system is unable to provide optimal services
- NGOs and other partners would be encouraged to work in unserved and underserved areas which would be areas in hilly, tribal, desert regions or peri-urban areas and slums. The State and the District Health Societies would have the flexibility to categorize unserved and underserved areas for focused attention
- Private sector health care services are more concentrated in urban and peri-urban areas and National Sample Surveys has consistently shown that vast majority of not only rich, but also poor population do seek care from private sector. Attempts should be made to develop partnerships with private sector, so that the goal of universal access can be achieved.
- The process of renewal of MOU would be on the basis of performance as per the review and quarterly reports submitted
- The updated list of approvals and collaborations must be maintained at the district and state level for all partnership options. The updated list has to be updated in Nikshay. The presence of these healthcare setups in the States/ districts needs to be prioritised and effective communication channels and reporting mechanisms set up at the district and State levels.

Partnership Options

The National Guideline for Partnership was developed in 2014 on how different stakeholders can supplement the efforts of the government for TB control in India. The National Guideline for partnership consists of four thematic areas:

1. Advocacy Communication and Social Mobilisation (ACSM)
2. Diagnosis and treatment
3. TB & Co-morbidities
4. Programme Management

Engagement of Professional Associations

Professional associations have a key role to play in TB control activities In India and any their engagement and active involvement is important for stewardship in private sector engagement. Organisations like IMA, Indian Academy of Paediatrics (IAP), Indian Nursing Association, Indian association of medical microbiologists, Indian Public Health Association etc. are key resources for dissemination of knowledge on diagnosis and treatment guidelines in RNTCP and Standards for TB Care in India.

Pharmacist / Chemists involvement:

RNTCP has signed MOU with Indian Pharmaceutical Association (IPA), All India Organisation of Chemists & Druggists (AIOCD), Pharmacy Council of India (PCI) and SEARPharm Forum representing World Health Organization (WHO) – International Pharmaceutical Federation (FIP) Forum of National Associations in South East Asia for engaging pharmacists in RNTCP for TB Care & Control in India. Pharmacists should be involved for early identification and referral of presumptive TB cases for diagnosis, treatment supporter for TB patients, increasing community awareness about TB and MDR-TB, patient education and counselling, promoting rational use of Anti-TB drugs and contributing to preventing the emergence of drug resistance

Laboratory involvement:

To reach all TB patients in India need to include dominant private sector and private laboratory is not an exception. Laboratories are engaged through partnership options under National guidelines of partnerships. Additionally, to facilitate use and access to affordable and accurate tests endorsed by the World Health Organization (WHO) and the Revised National TB Control Programme (RNTCP). One of such mechanism is Initiative for Promoting Affordable, Quality TB Test (IPAQT). Under this initiative, several private laboratories in India have agreed for not exceeding negotiated, ceiling prices to patients, notifying the government of the cases diagnosed, promoting the use of these tests and participating in external quality assurance (EQA) and in exchange, they would get reagents at significantly reduced prices. In exchange for offering lower prices, the manufacturers and distributors would receive greater and more predictable volumes from the previously untapped private market.

Involvement of Medical colleges in RNTCP

To widen access and improving the quality of TB services, involvement of medical colleges and their hospitals is of paramount importance.

The medical colleges in India have been involved under RNTCP 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 RNTCP, recommend policy suggestion regarding medical colleges' involvement in the RNTCP, coordinate with the Central TB Division, and monitor the activities of the ZTF. 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 Designated Microscopy Centres (DMCs) & Treatment Support Centre, as well as other activities, in all the medical colleges in the respective States. Core Committees, at the level of medical colleges facilitate inter-departmental coordination for programme implementation. Core committee meet every month. DMC and Treatment Support Centre are established in all government and private medical colleges and these are equipped with suitably trained additional manpower in the form of Medical Officer (MO), laboratory technician (LT) and TB health visitor (TBHV).

STF Workshops are held once a quarter in each State to review the activities of the previous quarter and dissemination of the updates under RNTCP to all medical colleges. Annual ZTF CMEs cum Workshops are held every year. This is an opportunity for reviewing the performance of STF & medical colleges and advocating the guidelines of RNTCP. Operational research is one of the important activities of Medical Colleges. To encourage young physicians RNTCP support postgraduate thesis on tuberculosis

Research

The National TB Control Programme is based on global scientific and operational guidelines and evidence. As new evidence became available, RNTCP has made necessary changes in its policies and programme management practices. In addition, with the changing global scenario, RNTCP is incorporating newer and more comprehensive approaches to TB control. To generate the evidence needed to guide policy makers and programme managers, the programme implemented measures to encourage operational research (OR).

The program requires more knowledge and evidence of the effectiveness of interventions to optimize policies improve service quality and increase operational efficiency. This has led to the realization of the need for a more proactive approach to promoting OR for the benefit of the TB control efforts. Furthermore, the program seeks to better leverage the enormous technical expertise and resources existing within India both within the Program, and across the many medical colleges, institutions and agencies.

Operational research aims to improve the quality, effectiveness, efficiency and accessibility (coverage) of the control efforts.

To promote and support OR, a Research Cell has been constituted at CTD to Coordinate the National Standing Committee on Operational Research comprising of 14 individual and institutional members. This Committee mainly provides technical guidance to CTD on OR and expertise to identify OR priority areas for commissioned research. Apart from it there are Zonal and State Operational Research Committees which identify priority areas for research as relevant to their Zone/State, based on the national research agenda.

The scientific agenda, developed by the Central TB Division and partners, articulates opportunities to understand RNTCP weaknesses, develop solutions, and refine policies to better achieve the programme objectives. The RNTCP promotes and supports research on issues which are of key relevance to guide interventions and to monitor and evaluate the impact of the programme through collaboration with specialized institutions.

Studies on the RNTCP Operational Research agenda is prioritized for funding by the RNTCP. Proposals are to be submitted in the prescribed RNTCP OR proposal format as per prescribed mechanisms to the state and zonal OR committees. Proposals with a budget of Rs. 5 lakhs or less will be reviewed and forwarded by the State OR Committee to the respective zonal OR committee for approval or rejection and it will not require approval by CTD. Proposals of more than Rs. 5 lakhs will be reviewed and sent to CTD for consideration. PG students undertaking research on a topic listed on the RNTCP Operational Research agenda are eligible for a grant of Rs 30,000. Approved proposals would be funded by the respective state from the account head on “Medical College” if the proposal is from a Medical College and from the “research and studies” head if the proposal is from another type of institution or agency. Funds for OR proposals will be released in three instalments – 50 % at the beginning of the study, 30% at mid-point of the study when a particular milestone has been achieved and remaining 20% after the final report is made available. Thesis grants will be released at 80% in the beginning and remaining 20% after the final report is made available.

Projects that involve human subjects require documentation of ethical approval from an institutional ethical committee. Before submission, all studies should have agreement from the host (public or private) institution where they will take place, and the endorsement should accompany the proposal.

For detailed information on the research priority areas, processes for submission of the research proposals, funding mechanisms, levels of approval & details of researches done over a period of time under the programme, the information is available on the official web site of National TB Control programme tbcindia@gov.in

Disaster Management and TB

On many occasions, when a disaster strikes a primary health care service, it loses control over tuberculosis and the cases can migrate. Under those circumstances, the most important thing is to continue the treatment of those in temporary shelters and establish a monitoring system over those that have shown respiratory problems of the disease for over two weeks. Those who persist with respiratory symptoms should have a diagnostic evaluation done and the treatment should immediately started for diagnosed cases.

Keeping a stock of first line medicines is necessary. A nurse, nurse auxiliary or other health professional should manage this stock in the shelter.

In temporary shelters or camps which remain for a long periods following the emergency, it is necessary to take into account the following risk factors:

- Population displacements are common in disaster situations, and this can create problems in treating and monitoring patients with TB.
- Population migration in the aftermath of disasters makes it common for persons from areas where the prevalence of TB differs, to come into contact with each other.
- Overcrowding is common in shelters and temporary settlements. A patient that is sputum smear positive and that is not managed, becomes source of transmission.

Do's and Don'ts:

1. Avoid close contact with people who are having respiratory illness.
2. The sick person should stay at home, and avoid going into the community, school/office, public places for at least 24 hours after symptoms have resolved.
3. Sick persons at home should keep distance from others.
4. Respiratory Hygiene/Cough Etiquette:-
   a) Cover the nose/mouth with a handkerchief/ tissue paper when coughing or sneezing which should be disposed off in dustbins;
   b) Perform hand hygiene (e.g., frequent hand washing with soap and water, alcohol-based hand rub, or antiseptic hand wash) and thoroughly dried preferably using disposable tissue/ paper/ towel after contact after having contact with respiratory secretions and contaminated objects/materials.
      a. Triple layer surgical Mask of standard and certified make should be worn by Suspected/ probable/confirmed cases of TB or by the care provider in home care settings and close family contacts of such cases undergoing home care.
      b. Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.
      c. Avoid smoking.
      d. Persons who have difficulty breathing or shortness of breath should seek immediate medical attention and report to the nearby hospital.
      e. If sick persons must go into the community (e.g., to seek medical care), then they should wear a face mask or use a handkerchief or tissues to cover any coughing and sneezing so as to reduce the risk of spreading the infection in the community.

Post disaster rapid assessment of TB programme:

Rapid assessment and response in disaster situation for TB should be integral part of rapid response team.

Infection Control measures

Airborne Infection Control

Acute respiratory infections (ARIs) are the leading cause of morbidity and mortality from infectious disease worldwide, particularly affecting the youngest and oldest people in low and middle-income nations. These infections, typically caused by viruses or mixed viral– bacterial infections, can be contagious and spread rapidly. Although knowledge of transmission modes is ever-evolving, current evidence indicates that the primary mode of transmission of most acute respiratory diseases is through droplets, but transmission through contact (including hand contamination followed by self-inoculation) or infectious respiratory aerosols at short range can also happen for some pathogens in particular circumstances.

In modern medicine, infection prevention and control (IPC) measures in health-care settings are of central importance to the safety of patients, health-care workers and the environment, and to the management of communicable disease threats to the global and local community. Application of basic IPC precautions, such as Standard Precautions, is a cornerstone for providing safe health care. In an era of emerging and re-emerging infectious diseases, IPC in health care is as important now as ever.

TB infection control is a combination of measures aimed at minimizing the risk of TB transmission within populations. The foundation of such infection control is early and rapid diagnosis, and proper management of TB patients. National guidelines on airborne infection control in all health settings including HIV care settings were developed that included a combination of simple managerial, administrative, environmental and personal protection measures. Operational feasibility and effectiveness of the guidelines have been conducted in the states of West Bengal, Gujarat and Andhra Pradesh.

The programme envisages integrating the airborne infection control guidelines of the programme with the general health system guidelines. Activities such as advocacy, guideline awareness and capacity building would be initiated at the state level and subsequently overseen by the general health system. NAIC guideline will be implemented at high risk centers at DR-TB Centers, ART Centers, C& DST Laboratory. The Implementation of National Airborne Infection Control policy includes following:

- Airborne infection control committee and plan
- Baseline assessment
- Resource planning and budgetary provisions
- Training of health care workers
- Implementation of administrative, environmental and personal protection measures.
- Prospective establishment health care centres should be in accordance with NAIC policy.

For detailed information on airborne infection control measures in health care settings, refer to Guidelines on Airborne infection control, 2010 at TBC India official web site tbcindia.gov.in

Healthcare worker surveillance

Successful AIC implementation is also important in preventing HCWs from becoming infected with drug-susceptible and drug-resistant TB, and thus preventing occupationally acquired TB disease. Screening HCWs at high risk of TB is likely to reduce transmission and with earlier diagnosis and treatment, prevent serious illness and disability. In an era of inadequate human resources for health, introducing the screening of HCWs for TB is crucial.

All HCW should be classified as Key populations due to their higher risk of acquiring TB and those who are symptomatic or/and with any signs of TB or Chest XRay abnormality will be offered a upfront CBNAAT testing upfront to rule in or rule out TB at the first instance and during periodic screening also.

For details, refer to Healthcare Worker (HCW) surveillance for tuberculosis (TB) in India- A handbook for health facilities.

Bio-Medical Waste Management

The Bio-medical waste generated from various sources has become a problem and much attention is being given worldwide to find out solution of this problem. The main concern lies with the hospital waste generated from large hospitals/nursing homes as it may pose deleterious effects due to its hazardous nature. Bio-medical wastes, if not handled in a proper way, is a potent source of infections, like HIV, Tuberculosis, Hepatitis, MRSA and other bacterial infections causing serious threats to human health. Owing to the discussed potential threats this waste needs prime attention for its safe and proper disposal.

The Government of India (GoI) under its Environment Protection Act (1986), passed the Biomedical Waste (Management and Handling) Rules in 1998 and a subsequent amendment followed in 2000. The rules form the legal framework for the collection, segregation, transportation, treatment and disposal of biomedical waste throughout the country. The State Pollution Control Boards (SPCBs) in the states and the Pollution Control Committees (PCCs) in the Union Territories are monitoring the compliance to the rules in the respective states.

According to these rules, Bio-medical wastes have been categorized under 10 categories and are required to be managed and handled as per prescribed procedures **(Annexure 21).** Bio-medical waste should not be mixed with other wastes but segregated into containers/bags at the point of generation in accordance with prescribed norms for its storage, transportation, treatment and disposal.

Bio-medical waste"means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto or in the production or testing of biologicals, and including categories mentioned in Schedule I;

It is the duty of every hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank etc which generates biomedical waste to take all steps to ensure that such waste is handled without any adverse effect to human health and the environment.

The RNTCP is integrated into the general health system of the states. Waste management is a component of overall facility management of the respective state health system institutions where RNTCP centres are located. Accordingly, **the waste generated by RNTCP should not be viewed in isolation, but is to be integrated in the broad framework of the peripheral institutions' waste management practices.** The peripheral health institutions would be responsible for disposal of the wastes and reporting to their respective PCBs.

Types of wastes generated by the RNTCP

- Human/biological waste (sputum);
- Sharp waste (needles, glass slides etc.);
- Used blister packs, drug packaging material;
- Plastic waste (waste generated from disposable syringes, cups and cartridges);
- Laboratory and general waste such as liquid waste, broomsticks, and paper waste; and
- Construction waste (waste generated from civil work activities).

Waste Management for RNTCP

Waste generated under RNTCP will be discarded with the overall waste of the health facility in which services under RNTCP are provided. The staff carrying out RNTCP activities like LTs and treatment supporter in PHIs will adopt infection control techniques as detailed in these guidelines and will take action to integrate waste generated under RNTCP into the waste management activities of the concerned PHI. The activities by the PHIs will include organized waste collection, information dissemination, reporting and monitoring of disposal of the waste

Disposal of sputum container with specimen and wooden sticks

Step 1: After the smears are examined, remove the lids from all the sputum cups.
Step 2: Put the sputum cups, left over specimen, lids and wooden sticks in foot operated plastic bucket/bin with 5% phenol or phenolic compound diluted to5%. The cups and lids should be fully immersed in the solution. Keep it overnight/ for about 12 hours.
Step 3: Next day/ at the end of the day, drain off the phenol solution in to the drain.
Step 4: Take out the sputum cup/lid/wooden sticks and put into a reusable metal or autoclave-able plastic container or red bag. The red bag should have abiohazard symbol and adequate strength so that it can withstand the load of waste and be made of non-PVC plastic material.
Step 5: Put this container/bag into the autoclave with other auto clavable BMW and the contents should be autoclaved at 121°C at 15 psi pressure for 15 – 20minutes. The autoclave shall comply with the standards stipulated in the rules. Under certain circumstances, if autoclaving is not possible, boil such waste in a pressure cooker of approximately 7 litre capacity containing adequate amount of water to submerge the contents and boiled for at least 20 minutes using any heating source, electrical or non-electrical. However the District Hospital/CHC/PHC etc. shall ultimately be expected to make the necessary arrangements to impart autoclaving treatment on regular basis.
Step 6: After adequate cooling, the material can be safely transported to a common waste treatment facility for mutilation/shredding/disposal.If a common waste treatment facility is not available in the area, the sputum cups/lids/wooden sticks after autoclaving, can be buried in a deep burial pit. LTs and support staff handling biological waste should wear gloves.

Disposal of stained slides

Step 1: The slides should be put into a puncture proof container and red bag. The red bag should have a biohazard symbol and should be made of non-PVC plastic material. This bag/sharp container should then be put in to an autoclave or pressure cooker for autoclaving/boiling.
Step 2 : Dispose off the autoclaved/ pressure boiled slides into a pit for sharps
Under no circumstances should the slides should be broken.

For detailed information on the Biomedical waste management refer to the documents-

1. Ministry of Environment, forest and climate change – Gazette Notification
2. Revised draft Guidelines for Common Biomedical Waste Management Treatment Facilities, Central Pollution Control Board, Delhi, February, 2014 and as updated by Ministry of Environment Forest and Climate or Central Pollution Control change from time to time.