# **National AIDS Control Programme**

Phase IV

**Technical Working Group** 

Theme: STI/RTI prevention and control programme

Dates of Consultation: 9<sup>th</sup> and 10<sup>th</sup> May; 27<sup>th</sup> and 28<sup>th</sup> July 2011 Venue: IDSA, New Delhi

## **INTRODUCTION**

Promoting Sexual and Reproductive health service is the cornerstone under the National AIDS Control Program III and Reproductive and Child Health (RCH II) of the National Rural Health Mission (NRHM). Sexually transmitted infections and Reproductive tract infections (STI/RTI) are an important public health problem in India. A countrywide Rapid Assessment Survey (RAS) indicates that 12% of female clients and 6% of male clients attend the PHC OPD for complaints related to STI/RTI. The 2002 ICMR multi centre community prevalence study of STI/RTI has shown that 5% to 6% of sexually active adult populations are suffering from STI/RTI.

Individuals with STI/RTI have a significantly higher chance of acquiring and transmitting HIV. Moreover, STI/RTI are also known to cause infertility and reproductive morbidity. Controlling STI/RTI helps decrease HIV infection rates and provides a window of opportunity for counseling about HIV prevention and reproductive health. Provision of STI/RTI care services is a very important strategy to prevent HIV transmission and promote sexual and reproductive health under the National AIDS Control Programme (NACP) and Reproductive and Child Health programme (RCH) of the National Rural Health Mission (NRHM).

Strategies of STI/RTI prevention and control include

- 1. Provision of standardized STI/RTI management to general population
- 2. Provision of standardized STI/RTI management to high risk group population
- 3. Provision of laboratory support for etiologic diagnosis and surveillance of STI/RTI

Syndromic case management (SCM) with appropriate laboratory tests is the cornerstone of STI/RTI management. SCM is a comprehensive approach for STI/RTI control endorsed by the World Health Organization (WHO). This approach classifies STI/RTI into syndromes (easily identifiable group of symptoms and signs) and provides treatment for the most common organisms causing the syndrome.

Other important components of STI/RTI management include treatment compliance and followup, counseling, partner treatment and condom promotion. Implementation of a standardized SCM simplifies training and supervision, reporting and drug management.

Under Sexual and Reproductive health services, prevention and control of sexual and reproductive tract infections (STI/RTI) is the main strategy to reduce reproductive morbidity and transmission of HIV transmission (MDG 5 & 6).

National AIDS Control programme is entering its fourth phase and followed and adapted a participatory planning approach and invited experts from different domains as well as community to deliberate, discuss and suggest strategies for fourth phase.

NACO organized two rounds of the TWG meeting for STI for NACP IV planning on the 9<sup>th</sup> and 10<sup>th</sup> of May; and 27<sup>th</sup> & 28<sup>th</sup> of July 2011 at New Delhi. The issues discussed and preliminary recommendations given as well as some issues flagged for further discussion during the first meeting were reviewing and finalized in the second meeting.

# **CURRENT STATUS OF IMPLEMENTATION**

#### Achievements

The programme under NACP III started with 544 STI clinics, mostly located in teaching and district hospitals. Realizing the huge burden of reproductive morbidity, especially among women and adolescents, department of Obstetrics and gynaecology was linked with Dermato- Venereology and the clinics were named Designated STI/RTI clinics (DSRC). The programme has been scaled to 1033 DSRC by 2011.

Programme introduced pre-specified colour coded STI/RTI drug kits for introducing standardization in treatment and ensuring compliance to treatment.

Managing STI among High Risk Groups, another crucial component of the programme was not given much importance in the previous phases. In NACP III, this gap was addressed and all the 1744 targeted intervention projects supported by both NACO and donors were linked with programme and components of essential STI service package for HRG were defined to include presumptive treatment, regular medical check up and biannual syphilis in addition to early diagnosis and treatment of symptomatic STI. All these clinics were also made to report regularly.

No of STI/RTI episodes treated	2008 - 09	2009 – 10	2010-11
Target	100 lakh	100 lakh	100 lakh
Achievement	66.7 lakh	82.4lakh	100.2 lakh
Percentage	66.7%	82.4 %	100.2 %

The physical target achievement year wise is detailed below.

Counselors were appointed at all Designated STI/RTI clinics with a primary objective of counselling STI/RTI clients on risk reduction, awareness of safer sex behaviours, follow up, linkage with TI projects and data management.

A set of training material was developed jointly with Maternal Health division to train medical officers, nursing personnel, laboratory technicians and counsellors; as well as doctors in private sector. A cascade model of training was adapted and NACO has created a pool of over 1000 resource persons at national, state, regional and district level.

	No. Trained		
Category of Health Care Providers	2009 - 10	2010 – 11	
STI Clinic Doctors	1,779	2150	
STI Clinic Paramedical staff	1,263	1427	
Preferred Private Providers	3,809	1453	
STI Counselors	660	474	
Total	7,511	5504	

Convergence with NRHM was initiated and close working coordination developed with maternal health division for joint procurement of colour coded STI/RTI drug kits and roll out of services through sub-district level health facilities. 2441 doctors and 4949 paramedical staff have also been trained at the sub-district level health facilities. Regional STI training, research and reference laboratories (Regional STI centres) provide laboratory based support and evidence to the programme. Five of these centres, set up under the National VD control programme were revived and two additional Regional STI centres were established at Delhi and Baroda, taking the total number of Regional STI centres to seven. These centres provide etiologic diagnosis, syndromic validation of STI/RTI, gonococcal anti-microbial sensitivity testing and conduction of syphilis EQAS across linked state reference centres.

Programme partnered with the private sector, which was initially a client based approach, later changed to HRG focussed model across the country. Close to 4500 providers in private practice have been linked with the programme through TI NGOs to provide STI service delivery to the HRG.

#### **On-going initiatives**

Programme focussed STI service delivery to PLHIV and HRG and converted the standalone STI clinic into hub of activities with referral linkages to ICTC, ANC, Gynae, and general laboratory, RNTCP, PPTCT and TI Projects.

Twice a year performance review of the programme is done at national level, where quality based grading of the states has been done as per reported data. Regular feedback has been provided.

Single prick and test system for screening for HIV and syphilis is introduced at all ICTCs linked to DSRC.

Training of the Doctors and paramedical staffs of the PHC/ CHC/Block PHC etc on STI/RTI management is rolled out. Monthly reporting from these facilities on STI/RTI indicators is being strengthened.

Programme has introduced supportive supervision and field level trouble shooting, which has improved reporting, minimized errors in recording, built the skills of providers and as a spill effect, many mentors have been developed in each state.

#### Gaps identified

1. Posts of STI focal person in states are vacant mostly because of posts are for deputation candidates at the level of deputy director/ assistant and carries existing pay scale without additional honorarium. Though programme facilitates filling up of the posts with contractual employees, the pay and perks are not adequate to attract candidates with high capacity.

- 2. The low level of hierarchy of the STI focal person is a big barrier in effectively coordinating with other departments for achieving functional convergence.
- 3. Majority of the deputed candidates from the general health system do not have programme management skills and are not interested in undertaking field visits.
- 4. Mentors from the medical college are not willing to conduct field visits in spite of adequate funds released for the purpose.
- 5. 40% of the pregnant women reaching facilities at the district level and above are missing syphilis screening.
- 6. Although Regular Medical check up has been introduced as a package of services for the HRG, there is a reluctance in the community to undergo physical and internal examination during regular medical check up also all the private providers especially non MBBS providers do not have adequate infrastructure and skills to conduct internal examination. There is a 60% gap in reaching RMC targets for HRG.
- 7. Ensuring quality services through preferred providers is a gap.
- 8. Poor coordination between clinical departments (skin –VD and Gynaecology), TI projects and Regional STI centres lead to under utilization of available resources and not reaching desirable outputs.
- 9. Programme could not conduct community based STI/RTI prevalence study as envisaged in the phase III due to heavy cost involved in doing the same. Hence programme has to depend on 2002 0-3 community based study for data for estimating the disease burden and setting target.
- 10. Reporting from sub-district level facilities under NRHM is incomplete and erratic.
- 11. As a pool funded programme, procurement of consumables has to happen at state level and since quantities are small, SACS are unable to get bidders. Hence most states are decentralizing procurement to the centres

## Implementation issues

## At National level:

Procurement and supply chain management of colour coded STI/RTI drug kits and RPR test kits

Quality testing of RPR test kits

## At State level:

Vacancy position of STI focal persons

Lack of feedback systems

Poor monitoring

Poor coordination between RCH II focal person under NRHM and STI focal person and poor ownership of the STI programme by NRHM at state level

Poor coordination between TI and STI focal person

Poor coordination between programme and M&E

#### At District level:

Lack of effective communication and follow up with CMO/CMOH/Civil surgeon/ DMHOs by state NRHM on STI related issues Lack of initiative to budget and articulate activities relating to STI programme under NRHM in district/ state PIP

#### At Facility level:

Half hearted involvement of gynaecologists Lack of dedicated staff other than counsellor Lack of ownership by the trained providers Underutilization of services Roll out of services in PHC and CHC

#### Challenges

- 1. Effective partnership with private sector (organized and unorganized)
- 2. Lack of country representative disease burden estimates
- 3. Reaching hard to reach HRG and pregnant women across all health facilities for syphilis screening
- 4. Inability to culture and isolate gonococci
- 5. Lack of laboratory based STI surveillance
- 6. Lack of facilities to evaluate latest STI diagnostics and point of care tests

# STRATEGIC APPROACHES FOR NACP IV

#### Vision

To provide universal, comprehensive quality standardized STI/RTI services to all population groups through convergence and integration mechanisms and facilitate reduction in HIV transmission and reproductive morbidity.

#### **Priorities (programmatic, geographical)**

- 1. To provide STI/RTI services at all government health facilities (Medical colleges, district hospitals, sub-divisional hospitals, PHC, CHC etc)
- 2. To provide quality STI/RTI services to high risk group population through flexible approach of service delivery
- 3. To partner with private and organized public sector units for increasing the reach and coverage of the programme
- 4. To support the laboratory services for STI/RTI diagnostics and to set up STI surveillance systems
- 5. To strengthen capacity building and mentoring needs to achieve quality service delivery through all facilities and ensure quality assurance

STI/RTI prevention and control will be prioritized in all the states up to district level. Geographic priorities for STI/RTI prevention below district level will be focussed especially on category A and B districts based on HIV/AIDS prevalence, high focus districts under maternal health programmes and other emerging districts.

#### **Emerging issues**

Policy changes to introduce task sharing/shifting between doctor and nursing personnel. Current laws for involving AYUSH and traditional healers into program Inadequate/lack of dedicated support systems for monitoring service delivery at NRHM facilities.

Lack of dedicated staff other than counsellor to scale up service delivery facilities Documentation of less sensitive strains/ drug resistant strains of gonococci

# Changes suggested for Institutional set up for achieving the vision and service delivery issues, how could be done, by whom and what levels:

DDG, STI should be the national program manager for STI/RTI component implementation at all levels of care. He/she should be directly responsible for programme implementation at district level and above and for overseeing and monitoring the implementation at sub-district level health facilities through NRHM /NUHM. A core team comprised of DD (STI), AD (STI)/ technical officer (STI) and technical experts from NTSU should be positioned at central level to assist DDG (STI) in programme management, implementation, capacity building and monitoring. The rank of STI focal person in SACS should be of a JD ranked officer at State level for better coordination, and administration of programme.

Atleast one programme officer (STI) should be positioned in every TSU to facilitate and oversee STI service delivery in close coordination with SACS STI focal person.

All the counsellors posted at DSRC should also be trained on ARSH, family planning and related issues; all counsellors in family planning and ARSH, as well as nursing staff of CHC/PHC should be trained on HIV/ STI counselling.

All the LTs working at ICTCs wherever they are located should be trained to do syphilis and HIV testing.

State reference centres should be operationalized, supported with 1 Lab Technician and grant for consumables to carry out STI diagnostics.

Community based survey; base line in Year1 of NACP IV and end line in last year of NACP IV to be conducted to estimate STI burden and document changes in epidemiology, covering 1 protozoal, 1 fungal, BV and 3 bacterial curable STIs as markers of STI/RTI burden among various sub group of populations.

## PROGRAMME TARGETS FOR NACP IV

#### Burden of disease, estimates -

2002/03 CSTI study suggested a prevalence of 5% to 6% of STI/RTI among sexually active population. This results into about 30 million episodes every year. Of this, 10 million was considered as target both for NACO and NRHM including TI. The remaining 20 million, supposedly seeking care from other organized government and PSU as well as from private sector. Program is achieving 100% of its target during the 4<sup>th</sup> year of NACP III. MTR team suggested a repeat study to understand the disease burden. BSS (2009), NFHS (2009), RAS conducted by ICMR (2005) have shown considerable sexual and reproductive morbidity in the country. MTR team conducted desk review of literature, field visits to certain select states and analyzed the passively collected CMIS data and concluded that the program targets were appropriate and may be revisited for revision if any new findings emerge for planning NACP IV. A study was suggested, which was not taken up due to high costs. The team also observed that there is no single scenario and there is wide variation across states and mostly concentrated among HRGs.

#### **Recommendation:**

- A sub group reviewed midterm review findings and felt that there is no evidence to state that the 2002 3 was inappropriate for programme planning for NACP IV.
- All the available evidences and studies, data of 2002 03 study and CMIS data etc were reviewed. The prevalence rates of individual STI were matched with findings of the desk review and it was suggested that the burden of disease is about 32.94 million annual episodes of STI
- The group also recommended that syndromic estimates could be derived using 2010 11 CMIS data.
  - *Ongoing target:* For first four years of the programme, target was kept at 10 million, which was reached in the fourth year. The target for 2011-12, was kept at 12 million.
  - *New targets:* The targets for NACP IV will be to reach 18 million STI/RTI episodes by end of NACP IV and the year wise targets for the same are detailed below

STI/RTI targets for NACP IV in millions					
Year	Designated clinic	NRHM	TI NGO	Organized and Pvt sector	Total
Year 1 (2012-13)	3.5	6.5	0.6	2.4	13
Year 2 (2013-14)	3.5	7	0.7	2.8	14
Year 3 (2014-15)	4.0	7.5	0.8	3.2	15
Year 4 (2015-16)	4.0	8	1	4	17
Year 5 (2016-17)	4.0	9	1	4	18

# OVERALL SUGGESTIONS AND RECOMMENDATIONS FOR NACP IV

# To provide STI/RTI services at all government health facilities (Medical colleges, district hospitals, sub-divisional hospitals, PHC, CHC etc)

#### Public Health Facilities supported by NACO (Designated STI/RTI Clinic)

The NACP III adapted syndromic case management as a policy for implementing STI/RTI program. RTI has been included with STI, to reach MDG goals in an effective manner. NACO supports 1033 designated STI/RTI clinics (DSRC) across the country, ensuring every district has minimum one DSRC, which are located at Medical College hospitals, District Hospitals and select sub district level hospitals involving both Gynae and STI depts. Each facility is supported by one STI counsellor in the programme and doctors, staff nurses and lab technicians are available from the pool of human resource of the state/ central government. Standardized training, recording and reporting systems are developed. Colour coded STI/RTI drug kits are used to treat at first contact. Syphilis screening clubbed with HIV screening through single prick method at ICTC and syphilis screening of ANC attendees is supported in DSRC. Referral linkages have been developed with ICTC/PPTCT/ART/TI/RNTCP/CCC projects. NACO has a standardized system of capturing STI data every month through prescribed format. Sero prevalence of syphilis among DSRC is about 3%, among ANC less than 1% and among HRG about 7%. As per utilization of services eight states showing utilization of services by more than 14 clients per each working day. Six states showing less than 6 clients per working day. The rest of the states showing utilization of services by 6 to 14 clients per working day.

#### **Recommendations:**

- Continue with Syndromic Case Management (SCM) with minimal Lab support wherever facilities are available
- Continue with the existing support for counsellor in all Designated STI/RTI clinics. Addition of one counsellor for Obstetrics and Gynaecology department in all Designated STI/RTI clinics located in Medical Colleges.
- All counsellors (ICTC/PPTCT/ART/BB/DSRC) to be trained on a curriculum covering aspects of HIV/AIDS and STI/RTI as well as related sexual and reproductive health issues and ARSH, so as to ensure comprehensive counselling and effective cross-linkages.
- Programme should ensure strengthening of existing OPD for quality STI/RTI service delivery instead of positioning additional system, which is not always feasible due to lack of dedicated space and manpower.

- STI/RTI service delivery should be through involvement of all possible service providers of the designated facilities irrespective of specialities, not limiting to gynae and STI specialists. GDMOs also should be involved to enable uninterrupted service delivery.
- Programme should explore the possibility of task shifting i.e., getting nurses and AYUSH doctors to prescribing the drugs for SCM. An Operations Research should be conducted to establish the feasibility, usefulness & safety.
- In addition to the counsellors, all laboratory technicians in the ICTC/PPTCT programme also to be trained for syphilis testing.
- Index client partner treatment for GUD non herpetic, urethral and cervical discharge clients should be followed, wherein the index client is provided the treatment for his/her partner as well.
- District level quarterly review of Skin, OBGY, family planning, Microbiology, ICTC for inclusion of referrals and minutes of meeting sent to be SACS. DAPCU, wherever available should be involved in this meeting and report to DPM.

### Integration with NRHM

According to joint working group recommendation, NACO STI Division has spearheaded the convergence process. The STI/RTI services are delivered at NRHM sub district health facilities through the existing staff of health facility. NACO ensures uniform service delivery through a standardized training plan and development of a cadre of master trainers in every state and district, who in turn are training doctors, staff nurse and laboratory technicians from every PHC/CHC/MMU/Dispensary etc varieties of sub district health facilities. Colour coded STI/RTI drug kits have been made available at all these facilities. NRHM currently reports STI /RTI data in absolute numbers through HMIS without any syndromic bifurcation. The other key indicators pertaining to STI/RTI have been proposed for inclusion in HMIS. Syphilis screening of ANC is being focused and referral linkages with DSRC and TI projects through Link workers and ASHA/ AWW/ MPHW is envisaged.

Program implementation at state level is overseen by STI focal person at SACS in close coordination with the state and district RCH officers and PMU, but there are issues of ownership of programme at state and district level.

#### **Recommendation:**

• NACO should provide handholding support to provide standardized service delivery through the NRHM facilities in close coordination with maternal health division at national level. Positioning of structured monitoring system at national, state and district level for facilities under NRHM in convergence with NACO would be finalized in

consultation with maternal health division. NRHM should ensure regular reporting from all NRHM facilities in the HMIS with respect to the agreed STI/RTI monitoring indicators.

- Syphilis screening of pregnant women should be scaled up across all ICTC/PPTCT and F-ICTC located in the facilities supported by NRHM. NRHM should budget to procure the requisite numbers of syphilis screening test kits.
- The programme should involve Urban Health facilities (Urban health facilities, health posts, corporation hospitals and to cater to populations living in urban and peri-urban slums. NACO/SACS should provide training of service providers and syndromic colour coded drug kits to treat STI/RTI. Syphilis screening should be ensured in these centres for both STI/RTI attendees and pregnant women through state support.
- Positioning of STI programme with state health system would also be helpful to reach maximum number of people. State RCH II officer and STI focal person at SACS would be responsible for coordinating with the district RCH II officers and ensuring service delivery at sub-district level. Responsibility for treatment and monitoring needs to be fixed with NACO. In this regard clear role clarity of NACO/NRHM needs to be defined at all levels and if possible within a time frame for procurement, service delivery, training, supportive supervision.
- Mobile medical units under NRHM should be linked with difficult to reach population and linkages to be established between MMU and link workers, Asha and AWW. NRHM should train the staff of MMU on syndromic case management and provide colour coded drug kits. The facility may also be used to screen pregnant women for syphilis and HIV who are not accessing health facilities at PHC/ sub centre have not been utilized properly. ICTC & STI services should be integrated with mobile van under NRHM. Outreach workers should be aware of the sites visited by mobile van to mobilize clients for ICTC services.
- Exposure visit of NRHM health workers to designated STI/RTI clinics should be included as part of their training. In service training of sub district level doctors should include STI/RTI management.
- Disaggregated data on Syndromic break up should be collated at district level and included in form 9 being filled by the sub-district level facilities.
- The existing mechanism of monitoring of NRHM (monthly meetings at PHC, CHC and District level) to be strengthened to monitor coverage and to ensure delivery of quality STI/RTI services.

#### **Referrals and Linkages for Sexual and Reproductive health services**

The program has linked STI and RTI together, thus both Gynae and STI departments function together for a comprehensive service delivery. Apart from this, DSRCs have been linked with ICTC, PPTCT, ART and TI projects. The referrals to ICTC helped the program to detect unidentified PLHIV among the DSRC attendees. The Counselor at DSRC is also encouraged to

conduct weekly outreach with TI staff at hot spots and motivate the community to seek services from DSRC both STI consultation and Syphilis and HIV screening. The DSRCs are also linked with regional STI centers for lab assessment of patients and samples. All clients found sero reactive for HIV are linked with ART centre and responsibility jointly taken by ICTC and DSRC counselor.

The existing DSRCs are part of general health system and also cater to youth, women and adolescents. As per CMIS reports about 20% of attendees are adolescents. DSRCs are not formally linked with Family Planning and reproductive health services, though informal referral services happening between departments. All DSRC staff including counselors are oriented on ARSH services as part of their training curriculum. DSRCs branding "Suraksha" is brand name for "Sexual and Reproductive health services" and there is scope for extending the brand to all SRH services.

#### **Recommendation:**

- Sexual and Reproductive Health services should be comprehensive in nature and there should be functional linkages of gynae, STI, ANC family welfare, ARSH and post partum facilities in the given hospital for meaningful services, through common windows/ platforms wherever possible.
- "Suraksha" brand name for "Sexual and Reproductive health services" should be extended to all sub-district level services. Media campaign should be launched to popularize these facilities highlighting the availability of quality sexual and reproductive services. Male sexual health problems are also to be included in these clinics.
- NACO and NRHM should visit and explore possibilities of replication of innovations like help lines in implementing ARSH services by organizations such as Tarshi, Mamta, etc
- Referral linkages and outputs should be a part of dash board indicators for monitoring the programme at district, state and national level. The referral unit should be provided with feedback based on observation.
- The primary responsibility of making the cross-referrals effective is with the counselors of the respective facilities, however the same should be regularly reviewed by the medical officer in charge, TI and the programme managers at SACS.
- NACO should take a policy decision and instruct all counselors at ICTC, PPTCT and ART to refer all clients with history of un-safe sexual behaviour and all clients found reactive for HIV to STI/RTI clinic for a detailed history and examination. Existing protocols for ICTC, PPTCT,ART and TIs should include referrals to STI clinics for diagnosis including syphilis testing and treatment of STI

• Syphilis screening along with HIV screening through single window at all HIV testing facilities in the country should be offered to HRG, STI clinic attendees and ANC attendees.

#### Syphilis screening and elimination of congenital syphilis-

The programme recommends syphilis screening of all the STI/RTI clinic attendees as well as pregnant women attending antenatal clinics. The data suggests very low prevalence of syphilis among pregnant women and the next logical step could be the possibility of introducing elimination of congenital syphilis. Syphilis is easily diagnosable, treatable and curable bacterial STI and at the same time, is easily missed due to screening not being done. There are many simple screening test are available which will help to screen ANC attendees even in remote and rural field areas. Simple training is all that is needed to empower grass root worker to use these tests. Currently, screening of ANC attendees is largely limited to hospitals where DSRCs are, located. The screening can be scaled up to all ICTCs including F-ICTCs to cover larger number of ANC.

#### Recommendation

- Reaching the goal of congenital syphilis elimination entails a strong focus on institutional delivery and scaling up of syphilis screening and should be an RCH priority. Hence there is need for a focussed convergence between NACO and MH division to achieve the same. NACO with its expertise in programme implementation should share the technical expertise with MH division to design, implement and monitor systems for screening, treatment, follow up to ensure cure of infected pregnant woman, her spouse and the newborn.
- At 24x7 PHC and First referrals Units (Facility integrated ICTC) should also provide syphilis screening in the same testing opportunity.
- Both the divisions should consider introduction of point of care testing of syphilis as a strategy to reach larger numbers of pregnant women across the country, especially pregnant women residing in difficult to reach rural, desert, high altitude and tribal areas. All sera found reactive with POC must be subjected for further testing with RPR/VDRL test to understand infectiousness and to enable follow up of the individuals for cure.
- NRHM should incorporate sufficient funds to procure syphilis screening kits. To begin with these kits can be introduced across all those facilities where currently pregnant women are screened for HIV.
- All ANMs/ sub-centre level functionaries should be trained to use Point of Care testing in convergence with NRHM. This should closely follow NACO's initiative for whole blood rapid HIV testing.

- All the PPP ICTC should also do syphilis screening for pregnant women and refer for positive mothers for appropriate management.
- STI/RTI services and syphilis screening should be part of the existing accreditation guidelines for empanelment of private providers for JSY and other schemes under RCH programme to ensure service provision of STI /RTI services as per the defined package. Standardized cost for the same can be worked.

#### **Demand Generation**

STI division in consultation with IEC division has developed and disseminated program specific job aids and IEC material for patient education. Simultaneously mass media campaign through radio and TV has been undertaken. DSRCs have been branded as *Suraksha clinics* across country. The same material is also used across TI projects.

#### **Recommendations:**

- BCC tools explaining RMC, speculum examination, proctoscopy, presumptive treatment, syphilis screening etc should be developed and used in TI to reduce myths and misconceptions; fears and phobias related to these among HRG.
- IEC materials should be developed to address gaps like partner treatment, and also perceive risk and benefit in undergoing treatment.
- All IEC material must be undergo prior pretesting.
- There should be specific material for specific populations.
- The group emphasized the need for proper packaging of IEC material and adding messages on issues such as infertility, cancer care etc so as to destigmatise SRH.
- The entire IEC BCC material should link and articulate existing implementing grass root level workers such as link workers, ASHA, AWW, SHG, VHND committees etc as a primary source of further information to community.
- Transgender group requested for specific referral directory providing specific information related to silicone implantation, hormone replacement therapy, sex reconstructive surgeries as well as poster on drug interactions between the STI/RTI medicines, ART, hormones and general medicines and inclusion of the same in training curriculum of the providers.
- Special package for communication for SRH needs to be designed, keeping in mind that it should be kept non stigmatizing and emphasize confidentiality and privacy.
- National mass media strategies for reproductive health (maternal and family planning) should include a strategy in prevention and management of STI

- IEC material should include messages on dispelling myths and misconception, causation transmission and prevention, availability of treatment at service delivery point.
- Mass media campaign should have question and answer format columns to disseminate information on STI and RTI regarding free treatment, testing partner management and follow up.
- Develop IEC material on elimination of congenital syphilis specially on consequences of not treating syphilis in new born.
- Village health sanitation committee have group members who should be oriented on STI RTI services as well as prevention. Also include religious and political leader groups.
- Potential of Social networking sites should be explored for communication messages on STI RTI prevention and management
- Active e group to respond to questions addressed on NACO website. All help lines and call centres currently providing services on sexually reproductive health services should be providing information on STI/ RTI services.

# To provide quality STI/RTI services to high risk group population through flexible approach of service delivery

#### Targeted intervention projects -

Disease burden of STI/RTI among high risk group communities is significantly higher than in general population and a special focus is needed to provide good quality standardized services to them. The essential STI service package for FSW,MSM, TS/TG/ IDU comprising early diagnosis and treatment of symptomatic STI, quarterly regular medical checkup, twice a year syphilis screening, PT for first asymptomatic visit and repeated if she/he misses clinic services consecutively for more than six months is supported by NACO. Simple user friendly guidelines have been disseminated for implementing STI services to HRG population. Different modalities of service delivery are encouraged (Static, Preferred provider, health camps, linking with government health facilities, and hybrid models) to scale up the number of HRG accessing the services. The service utilization has scaled from less than 5% to over 60% across various subpopulations and states. 4036 practitioners in private practice (both MBBS and Non MBBS qualified) have been identified as community preferred providers and trained to provide services to HRGs. All the TI projects are registered in CMIS for reporting STI data. All the key staff (PM/Staff Nurse/Counselor, M&E Assistant/Accountant) from each of the TI projects in country has been oriented on STI program.

Program implementation at state level is overseen by TI focal person at SACS, in close coordination with the STI focal person. In some states there is support from PO-STI in technical support unit. The numbers of facilities to be monitored have increased from 1500 TI to 4036 preferred private providers enrolled for TI STI service delivery.

#### **PPP** scheme

In the current program, private sector was involved through third party agencies across the country to provide services to clients of sex workers, primarily. About 8000 providers in private sector were identified through structured process and trained and franchised for service delivery. Drug kits were provided under social marketing concept. Due to poor performance, drug marketing related issues, the scheme was discontinued and modified as a model to cater HRG population using the existing TI projects. Presently, 4036 community preferred providers have been involved to provide services to HRG across states. NACO colour coded STI/RTI drug kits have been given for free distribution to the HRG through TI projects. Providers are paid a maximum of Rs 50/- per consultation limiting to symptomatic visit or RMC visits. There is no cost reimbursement for follow up or partner treatment. The PPP scheme has scaled up the access to services and utilization by HRG has gone up from less than 5% to more than 60%.

#### Recommendations

- STI management amongst HRGs will remain NACO priority. The essential STI/RTI service package to HRG would be supported by NACO, comprising of
  - 1. Provision of free STI/RTI treatment.
  - 2. Regular Medical Check-up
  - 3. Biannual syphilis screening and HIV testing
  - 4. Presumptive treatment to FSW and MSM/TG
  - 5. Free supply of condoms for core population
  - 6. Partner management.
  - 7. Counselling services along with the PE led BCC and health education
- STI treatment for Regular partner of HRG should be provided free of cost. The programme should also support provision of free services to the bridge populations (truckers and migrants).
  - Service delivery to the HRGs will continue to through the existing TI supported mechanism such as static clinic, PPP, outreach clinic, satellite clinic, camps, referral to existing government health facilities etc.
  - The group recommended that TI and STI division NACO provide flexibility to SACS for using the best possible modality/ies for STI service delivery based on the population spread and number of HRG.
  - Minimal essential standard to be maintain in all the service delivery point in order to scale up service accessibility by HRGs
    - Minimum essential standards (Infrastructure) for the TI-STI service delivery in Static clinics are:
      - Confidentiality and Audio visual privacy
      - Areas for examination, counselling and consultation.
      - Equipment necessary for examination like, speculum, proctoscope, flexilamp, examination table etc
      - Waste management system
  - To support buying of essential equipment and consumables (speculum, proctoscope, gloves, lubricant etc) for all the clinics (static, satellite, outreach etc) and for PPP clinics from the programme
  - The budget for clinical services to TI to be modified to incorporate the complete package of recommended STI services and also accommodate for honorarium to preferred private providers in accordance to the tier of city and providing travel allowance to the doctors for the outreach health camps.
  - Group also suggested to the programme to consider and introduce service delivery for HRG through qualified ANM/ nurses to counter the non availability of qualified providers especially for north eastern states.

- All identified TI STI service providers at the 'Hot Spot' to be trained in STI/RTI management guidelines as per NACO prescribed curriculum for ensuring provision of effective management to all the HRG and their clients.
- TI NGO will work in close coordination with the health care providers in government to ensure that attitude of the Health Care providers towards the HRGs is addressed so that there is increase access of services by the HRGs. All trainings for health care providers should have a person from HRG communities and PLHIV networks so as to sensitize the service providers to bring in attitudinal change among service providers and to induce empathy towards MARPs among providers.
- Linkages with other service delivery centres to the TI to be reinforced to scale up optimal utilisation of the existing resources to ensure provision of all health care needs of the HRGs like Reproductive and Family planning needs, general ailments, TB, immunisation etc. For that there has to be formal linkage with the existing health care facilities like PHC, CHC, or in their absence through railway/ army/ other health facilities. Integration of DOTs programme within the TI set up can also be explored.
- TI NGO will coordinate and link with the CMOH/DHO/CS, Rogi Kalyan Samiti/district health samiti of the district to obtain some basic general ailments medicine for HRGs, so as to facilitate comprehensive health care for the HRG.
- HRG should be encouraged to avail STI/RTI service through the government facilities in a phased manner so as to achieve at least 25% service uptake from the government sector by the end of the phase IV.
- SACS should ensure and monitor the linkages between TI projects and State and Regional STI centres for laboratory screening of STI/RTI, understand aetiologies of repeat and recurrent STI and monitor drug sensitivity pattern of gonococci and impact of presumptive treatment among the core groups.
- Community monitoring systems to be introduced across TI projects as a policy to monitor the quality of service delivery by the community.
  - All TI clinic to be named as "Suraksha Clinic" in order to de-stigmatise the TI clinic. This will reflect that standardized services are provided at TI and other sites related to STI.
  - Supply chain management to strengthen in order to ensure that there is adequate and uninterrupted supply of commodities to the TI sites
  - Programme should consider conducting minimum two evaluations of PPP models through agencies and organizations.

## To partner with private and organized public sector units for increasing the reach and coverage of the programme

STI/RTI patients preferentially access services from private sector as well as from other organized health sectors under the government departments and public sector undertakings. Efforts have been made by the programme for partnering with other central government health systems such as Railways, ESI and Armed forces and paramilitary forces and further to scale up of linkages with other organized public sector undertakings such as SAIL, Coal India, etc and nationally accredited corporate hospitals like Apollo, Fortis etc.

Organised government sector includes Railways, ESI, Armed forces, CGHS, etc Public sector undertakings include SAIL, Coal India, Port Trust of India etc Organized private sectors includes corporate hospitals Unorganized private sector includes private practitioners (through the professional organizations like IMA, FOGSI, IASSTD, IADVL etc

#### **Recommendations:**

• The group agreed on the relevance and importance of partnering with the organized and unorganized private sectors to provide STI/RTI services to cover beneficiaries availing services from these sectors.

#### **Organized sector:**

- Existing infrastructure of the organized sectors will be utilized for providing standardized STI/RTI services to their dependant population.
- Training of health personnel of these sectors will be facilitated by NACO/ SACS through sharing of standardized training curriculum, job aids and trainers
- Mechanism for the data collection, incorporating minimum indicators will be devised by NACO and participating organization.

#### **Unorganized sector:**

- NACO/SACS will utilise the network of professional bodies like IMA, FOGSI, IAP, API, IASSTD, IADVL, and Federation of family physicians associations of India etc for partnering with private practitioners.
- Selected providers from Gynae, skin and general practitioners from the lists of doctors available with these networks/ associations will be trained on STI/RTI management. All the health care providers practising on STI/RTI around HRG sites will be mapped and included in the training. Trainings would be supported by NACO/SACS in terms of trainers, curriculum, job aids and organizational cost.
- Recording and reporting is one of the bigger challenges, hence minimal indicators should be introduced from the data retrieving from the private sector. Similarly, the monitoring

should be very minimal and may be institutionalized using the governing bodies of associations at district, state and national levels.

• Use of Just Dial services/ local networks/ cable TV/ NACO website etc to provide information on availability of standardized STI treatment.

## To support the laboratory services for STI/RTI diagnostics and to set up STI surveillance systems

#### **Enhanced Syndromic Case management:**

Enhancement in syndromic case management is in terms of simple to perform laboratory tests as per technical guidelines 2007, which are performed on every patient of STI/RTI. The providers were recommended to perform these investigations wherever available and feasible. The investigations are not mandatory for treatment. CMIS reporting also captures laboratory investigations which are reported by few centres regularly. Etiologic management of STI is not the programme policy. There were no rapid test kits to diagnose STI/RTI in current programme.

#### **Regional STI Centres and State Reference Centres:**

There are 7 regional STI centres supported under the programme located at Delhi (SJH, MAMC), Chennai (IOV MMC), Nagpur (GMC), Hyderabad (OGH), Kolkata (IOS KMC) and Vadodara (GMC). The mandate of the regional STI centres is to provide laboratory based support and evidence to the programme. These centres provide etiologic diagnosis, syndromic validation of STI/RTI, gonococcal anti-microbial sensitivity testing and conduction of syphilis EQAS across linked state reference centres.

In consultation with states, 45 state reference centres have been identified who are already working in the HIV programme under HIV EQAS. Each regional centre is allotted certain states and the state reference centres located within them. They are also linked to 25 - 30 Designated STI/ RTI clinics and TI projects. Regional centres have conducted capacity building training of the staff of these centres. SACS have allotted certain districts to each state reference centres to conduct lab assessment of samples or patients referred by the DSRC or TI located in these districts. The centres perform under the close supervision of SACS in coordination with four basic departments (Microbiology, Skin VD, PSM and Gynaecology)

The laboratory surveillance is currently limited to existing 7 regional STI centres. Most of the samples they screen are among attendees of DSRC. After 2002- 03 community based study, there is no cross country study conducted. Tamil Nadu has done laboratory based screening of about 45000 HRG. The results are yet to be disseminated. Avahan has conducted an Operations Research in Maharashtra and Andhra Pradesh, apart from an IBBA light. The major finding of these studies is widely prevalent asymptomatic STI. There is wide variation of STI/RTI prevalence across the country.

#### **Recommendation**:

• Group strongly recommended extending continued support towards strengthening the Regional STI centers as these are the only centers providing STI diagnostic support presently and would be a useful resource in conduction of antimicrobial sensitivity studies, periodic etiologic surveillance, community based prevalence studies, operations research etc.

- The group recommended creation of a sub-group to revisit terms of reference of the Regional and State Reference Centres and the implementation plan of laboratory based STI surveillance so as to efficiently utilize the existing resources and provide meaningful outputs to support the programme.
- The group recommended introducing minimal laboratory investigations as part of the programme as a parallel activity at DSRC located in Medical College hospitals. Enhanced SCM could be followed at medical college level.
- The group recommended introducing newer Point of care diagnostic test kits after regional STI centres validating their feasibility and suitability for the programme.
- The regional STI centres should develop the capacity to evaluate the syphilis test kits and newer diagnostic tests and help the programme to introduce them as add ons.
- The group also recommended scaling up regional STI centre concept to other premier laboratory based institutes under ICMR and develop linkages with them. NIB and NARI to be included as Regional STI centres.
- The group recommended linking of 45 state reference centres and 7 regional centres with GASP programme of WHO
- The group recommended NABL accreditation of all the 52 laboratories.
- The group recommended creating a small core committee to monitor and mentor Regional and State Centres' performance.
  - The core committee will act as an external quality assurance system, whose TOR will be defined by the programme division.
  - The core committee should consist of clinician, laboratory, programme and research/epidemiology person.
  - The committee should be linked to the research activity with other organizations and agencies working with department of health research for optimization of resources and effective utilization.
  - The core group will look at the proposals submitted by regional centre, prioritize them, and select the study to be given to the regional centre after vetting.

#### STI Surveillance:

- STI surveillance can be done in conjunction with HIV surveillance. Ideal sites will be HRG sites, which are adapting random sampling approach. It has been proposed to include STD sites also to cover general population. However, it was considered that substantial modification in methodology may be required.
- Once in 2 years Etiological surveillance of STI using gold standard test using the network of regional and state reference centres.
- The existing network of state reference centres should be used in conduction of periodic STI surveillance and assessment of samples of patients accessing private sector and NRHM facilities also.
- The group also recommended to strengthen the state reference centres with need based human resource, equipment and consumable support.
- Select mobile medical units could also be strengthened to undertake minimal laboratory tests as part of the package of tests to be delivered.

To strengthen capacity building and mentoring needs to achieve quality service delivery through all facilities and ensure quality assurance

#### Technical support and capacity building

STI division in NACO has been strengthened during NACP III. The division comprises of Deputy Director General who heads the division and is supported by one Deputy Director, one Assistant Director. The division is receiving able technical assistance through two Technical Experts of National Technical Support Unit and work in close coordination with the division as a team. There are one or two STI focal persons in SACS (totaling to 60 sanctioned posts at the level of Deputy Director and/or Assistant Director), of which 33 posts are filled. They are supported by Programme officer STI in Technical Support Units in 12 states. These national and state teams are supported by national, state and regional mentors and resource faculty, who are mostly from medical colleges and organizations, who are trained and focused on STI/RTI programme.

Currently the programme needs are greater and cannot be met with the existing team. In convergence with NRHM, the number of facilities to be monitored and requiring technical assistance has increased enormously from 1000+ DSRCs , 1700 + TI Projects , 4500 PPP to nearly 26000 additional facilities under NRHM and partnership with other organized and unorganized private sectors. In the light of the above, modalities to provide the monitoring, technical and mentoring needs of the scaled up programme require to be proportionately scaled up.

#### Recommendations

#### **Technical support**

- NACO should provide Technical support at National level to facilitate implementation of STI/RTI prevention and control programme at all levels, and closely coordinate and optimally utilize resources available under NRHM.
- DDG, STI should be the national program manager for STI/RTI prevention and control looking after implementation at all levels of care. He/she should be directly responsible for programme implementation at district level and above and for overseeing and monitoring the implementation at sub-district level health facilities through NRHM /NUHM.
- A core team comprised of DD (STI), AD (STI)/ Technical officer (STI) and technical experts from NTSU should be positioned at central level to assist DDG (STI) in programme management, implementation, capacity building, monitoring and supervision.

- The rank of STI focal person in SACS should be of a JD ranked officer at State level for better coordination, and administration of programme. The person assigned the task of monitoring the STI/RTI programme under NRHM should also be of sufficient seniority to be able to effectively liaise with both the departments.
- At least one programme officer (STI) should be positioned in every TSU to facilitate and oversee STI service delivery in close coordination with SACS STI focal person.
- In addition to existing manpower, if monitoring is to be done directly by NACO/ SACS for all the facilities including NRHM and private sector, at national level at least 3 consultants and 2 each at the state level and 5-6 at regional level should be added.

### Capacity building

Considering the large number of health providers who will be requiring trainings on STI/RTI management (1033 DSRC, 5000PPP, 26000 PHC/CHC, 10000 through organized sector), there is need for larger allocation of resources, material as well manpower to conduct this mammoth training task.

- Resource of trainers should be built at national, state, district levels to ensure the training through cascade model. The pool should include the programme managers and select programme implementers at all levels (national/ state/ district) and include representatives from all the stakeholders (NACO/MH division/SACS/ TSU/ RCH officers at state and district levels/organized sectors like railways/ ESI/ defense/ professional associations). Participation from private sector and other organized sectors should also be ensured.
- All possible training institutes in the government sector already involved under other health programmes such as HFWTC, District training centres, ANMTC etc should be involved for optimal utilization of available resources. The capacity of staff of these institutes should be built as trainers in addition to existing pool.
- In addition to existing government training institutions, private institutions/non governmental organisations should also be involved used in imparting training.
- Standardized training curriculum and operational and technical guidelines prepared by NACO and NRHM should form the basis of training.
- All participants should receive standardized takeaway material in the form of handouts, job aids, reporting and recording formats and IEC material.
- NACO would support training of trainers upto district level and training of service providers in DSRC, TI, organized and unorganized sectors. Training of service providers at sub-district health facilities is to be supported by NRHM.

#### Supportive supervision and Quality assurance -

The Operational Guidelines describes minimum standards of STI/RTI service delivery across all levels of service provision including DSRC, NRHM facilities and TI projects. To assess the

quality of service delivery, a standardized supervisory checklist is used to assess STI service delivery. Regular review of CMIS data is done regularly and key observations and gaps identified are shared with SACS for correction. Twice a year review of program officers is conducted at national level to assure quality of program implementation. Similar review is also conducted twice yearly for STI counselors and medical officers at state level. STI division has developed a scoring system to differentiate and grade various SACS based upon their performance and regularly uses the same to evaluate their performance. In addition, a standard operating protocol has been developed for all the laboratory tests for diagnosis of STI/RTI and the Apex centre has developed benchmarks for Syphilis EQAS and Gonococcal antimicrobial sensitivity patterns as per GASP protocols along with supervisory tool for state reference centres. A system of supportive supervision has been developed wherein all service delivery sites are regularly visited and mentored and feedback provided for improvement.

#### Recommendations

#### Supportive supervision:

- NACO to take a lead in monitoring STI/RTI service delivery at all levels.
- The existing monitoring mechanism available at NACO/SACS upto state level and through NRHM at district level (DPMU) to be utilised for monitoring. DAPCU should also be involved in all districts where present.
- NACO and MH division should have joint structured field visit plan at national and state level and conduct review of implementation at state and district level, which hastens and sustains convergence activities.
- There should be district level monitoring team for providing hand holding and supportive supervision in order to scale up implementation of services.
- Professional bodies, private medical colleges, private capacity building organisations, individuals with public health/clinical experience, etc may also be involved for mentoring due to shortage of human resources at the Medical Colleges to provide technical/ mentoring support to the facilities.
- Proportionately increase the staffing at the national as well as state level to cover the entire gamut of the monitoring activities covering wider number of facilities.
- The group recommends that the simple standardized supervisory check list may be adapted for NRHM facilities in consultation with MH division. NRHM facilities are to be monitored twice a year. Instead of all facilities, a fraction of them may be visited. Priority should be given to hard to reach facilities, facilities lacking adequate space and staff.

#### **Quality assurance of health facilities:**

• The quality control at two levels – internal & external & should be expressed in SOPs (what is to be done, how it is to be done, who is responsible for particular activity), which is not mentioned in current SOPs.

- MH division has to circulate the minimum standards prescribed under the programme jointly with NACO to all NRHM facilities through their existing systems for adherence.
- The group recommended mandatory monitoring of coordination between the four departments (Gynecology, Microbiology, Skin/VD and PSM) on a monthly basis by SACS and at least two times in the year by NACO in a regional manner.
- Quality Assurance of laboratories performing STI/RTI diagnostics is the whole and sole responsibility of State and Regional STI centers. They should have a structured key activity covering the laboratories up to district level.
- The group also suggested creating a small core committee of external experts from programme, clinical and laboratory, which will act as an external quality assurance system of laboratory diagnostics. NACO has to ensure that all the laboratories in the programme are adhering to the lab SOPs developed.
- The group recommends strengthening of M & E component under STI program and suggested institutionalizing feedback mechanism at centre, state & district level
- There should be a paragraph describing internal quality control and monitoring processes which will help better quality service delivery
- The operational guidelines need to be revisited periodically say every 3 years.
- Participation of private sector adhering to benchmarks may be acknowledged/ incentivized
- Regular & timely feedback to private sector helps to facilitate adherence to benchmarks
- The quality assurance should be for clinical services, lab testing & data collection and reporting

#### Suggested innovations in implementation

- Moving towards "Elimination of CONGENITAL SYPHILIS" in view of consistently reported low positive rates among pregnant women.
- Introduction of point of care testing for syphilis to cover hard to reach pregnant women, HRG and bridge population to upscale the uptake of syphilis screening.
- Conduction of a baseline (2011-12) and end line (2016 17) community based study across the country to provide the insight into the epidemiologic situation of various STI/RTI among various population sub-groups.
- The group recommended linking with disaster management teams at all levels to address the issues pertaining to sexual health needs of the displaced populations.
- The group recommends conducting OR on the sexual behaviour and sexual health needs of Intravenous drug users across four regions of the country, as there is no available data.
- The group recommended to link the STI programme with cancer screening programme to detect early HPV induced malignancies in HRG and DSRC attendees after studying the feasibility and cost effectiveness.
- The group recommends linking the STI programme with UIP for HBV vaccination for HRG and DSRC attendees after studying the feasibility and cost effectiveness.
- Introduction of Community monitoring mechanisms for both NACO and NRHM.

# MONITORING INDICATORS

Monitoring Indicators for activities specified are detailed below:

1a 1b	% of DSRC reporting in SIMS % of TI reporting in SIMS	Total number of designated clinic reported Total number of TI NGO reported	Total number of designated clinic in the state*100 Total number of TI NGO in the state*100
2	Average footfalls per each working day per reporting unit	Total Number of clinic visit in the clinic during the month (Total of row 1, 2 and 3 in section 1)	Number of working days (25 days per month)
3	% of male symptomatic attending DSRCs	Total number of males in row 1 of section 1 of monthly reporting format	Total number of row 1 and 2 of section 1 *100
4	VCD:LAP	Number of VCD cases reported in row 1 section 2	Number of LAP cases reported in row 4 section 2
5	GUD:UD (Males)	Number of GUD NH + GUD H among males row 2 and 3 in section 2	Number of UD among males in row 5 section 2
6	% of STI attendees screened for syphilis	Number of attendees screened for syphilis (row 3, section 3)	Total Number of clinic visit in the clinic during the month (Total of row 1 and 2 in section 1)*100
7	% of attendees missing syphilis screening	(Total number of STI attendees in Section 1 row 1 and row 2 minus Number of STI attendees screened for syphilis Row 3 Section 3))	Total Number of clinic visit in the clinic during the month (Total of row 1 and 2 in section 1)*100
8	% seroreactivity of syphilis among STI attendees	Number found seroreactive for syphilis (Row 4 Section 3)	Number of attendees screened for syphilis (row 3, section 3)*100
9	% of attendees ANC undergoing syphilis screening (ANC)	Total number of ANC attendee screened for syphilis (Row 2 Section 5)	Total number of ANC registered in the month (Row 1 Section 5) *100
10	% of attendees ANC missing syphilis screening (ANC)	Total number of ANC registered in the month (Row 1 Section 5) minus Total number of ANC attendee screened for syphilis (Row 2 Section 5)	Total number of ANC registered in the month (Row 1 Section 5) *100

11	% sero reactivity of syphilis among ANC attendees	Number of ANC attendees found sero reactive for syphilis (Row 3 Section 5) Number of ANC sero	Total number of ANC attendee screened for syphilis (Row 2 Section 5) *100 Number of ANC attendees
12	% of ANC syphilis sero reactive individuals treated	reactive for syphilis treated, (row 5 section 5)	found seroreactive for syphilis (Row 3 Section 5) *100
13	% of STI attendees referred for HIV testing	Number of STI attendees referred for HIV testing (row 7, section 3)	Total Number of clinic visit in the clinic during the month (Total of row 1 and 2 in section 1)*100
14	% sero reactivity of HIV among STI attendees	Number found sero reactive for HIV (row 8 Section 3)	Number of STI attendees referred for HIV testing (row 7, section 3)*100
15	% of STI attendees undergoing Presumptive Treatment (PT)	Number of STI attendees undertaken PT (row 2, section 4)	Total Number of clinic visit in the clinic during the month (Total of row 2 in section 1)*100
16	% of STI attendees undergoing Regular Medical Checkup RMC)	Number of STI attendees undergone Regular Medical Checkup, RMC (row 3, section 4)	Total Number of clinic visit in the clinic during the month (Total of row 2 in section 1)*100