

NATIONAL AIDS CONTROL ORGANIZATION (NACO)

24.1 INTRODUCTION

The National AIDS Control Programme (NACP) has been implemented by Government of India as 100% centrally sponsored scheme through State AIDS Control Societies in the states for prevention and control of HIV/AIDS. The first National AIDS Control Programme was launched in 1992, which focused on the national HIV surveillance system, prevention activities among High Risk Groups (HRGs) including information on HIV and the blood safety programme. NACP-II launched in 1999 focused on the scale-up of targeted interventions for HRGs, especially prevention, out-reach, HIV testing & counselling and fostered greater involvement of People Living with HIV (PLHIV) and community networks. The treatment programme was also launched under NACP II. Institutionalization of decentralized programme management through State AIDS Control Society was a key thrust in phase II. NACP-III launched in 2007, showed a rapid expansion of prevention, care, support and treatment efforts across the country with a focus on increasing service access points through institutional scale-up and out-reach.

24.1.1 Currently, the NACP-IV (2012-2017) is mid-way through implementation. It focuses on consolidating the gains made during NACP-III and aims to accelerate the process of reversal of the HIV epidemic. The key strategies under NACP-IV includes intensifying and consolidating prevention services with a focus on HRG and vulnerable population,

increasing access and promoting comprehensive care, support and treatment, expanding IEC services for general population and high risk groups with a focus on behaviour change and demand generation, building capacities at national, state and district levels and strengthening the Strategic Information Management System. Prevention and Care, Support & Treatment (CST) form the two key pillars of all HIV/AIDS control efforts in India.

24.1.2 The package of services provided under NACP-IV includes:

a) Prevention Services:

- Targeted Interventions (TI) for High Risk Groups and Bridge Population, Female Sex Workers (FSW), Men who have Sex with Men (MSM), Transgenders/Hijras, Injecting Drug Users (IDU), Truckers & Migrants;
- Needle-Syringe Exchange Programme (NSEP) and Opioid Substitution Therapy (OST) for IDUs;
- Prevention Interventions for Migrant population at source, transit and destinations;
- Link Worker Scheme (LWS) for High Risk Groups and vulnerable population in rural areas;
- Prevention & Control of Sexually Transmitted Infections/Reproductive Tract Infections (STI/RTI);

- Blood Transfusion Services;
- HIV Counselling & Testing Services;
- Prevention of Parent to Child Transmission;
- Condom promotion;
- Information, Education & Communication (IEC) and Behaviour Change Communication (BCC)—Mass Media Campaigns through Radio & TV, Mid-media campaigns through Folk Media, display panels, banners, wall writings etc., special campaigns through music and sports, flagship programmes, such as Red Ribbon Express;
- Social Mobilization, Youth Interventions and Adolescence Education Programme;
- Mainstreaming HIV/AIDS response and
- Work Place Interventions.

b) Care, Support & Treatment Services:

- Laboratory services for CD4 Testing, Viral Load testing, Early Infant Diagnosis of HIV in infants and children up to 18 months age and confirmatory diagnosis of HIV-2;
- Free first line & second line Anti-Retroviral Treatment (ART) through ART Centres and link ART Centres, Centres of Excellence & ART plus centres;
- Pediatric ART for children;
- Nutritional and psycho-social support through community and support centres;
- HIV-TB coordination (Cross-referral, detection and treatment of co-infections) and
- Treatment of Opportunistic Infections.

24.2 OVERVIEW OF HIV EPIDEMIC IN INDIA

As per the recently released, India HIV Estimation 2015 report, National adult (15–49 years) HIV

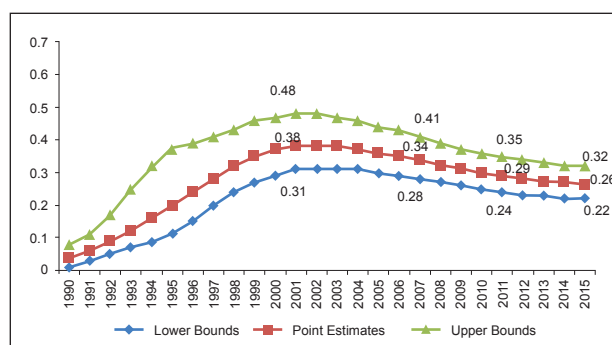
prevalence in India is estimated at 0.26% (0.22%–0.32%) in 2015. In 2015, adult HIV prevalence is estimated at 0.30% among males and at 0.22% among Females.

Among the States/UTs, in 2015, Manipur has shown the highest estimated adult HIV prevalence of 1.15%, followed by Mizoram (0.80%), Nagaland (0.78%), Andhra Pradesh & Telangana (0.66%), Karnataka (0.45%), Gujarat (0.42%) and Goa (0.40%). Besides these States, Maharashtra, Chandigarh, Tripura and Tamil Nadu have shown estimated adult HIV prevalence greater than the national prevalence (0.26%), while Odisha, Bihar, Sikkim, Delhi, Rajasthan and West Bengal have shown an estimated adult HIV prevalence in the range of 0.21–0.25%. All other States/UTs have levels of adult HIV prevalence below 0.20%.

The adult HIV prevalence at national level has continued its steady decline from an estimated peak of 0.38% in 2001–03 through 0.34% in 2007 and 0.28% in 2012 to 0.26% in 2015 (**Figure 2.1**).

Similar consistent declines are noted both in males and females at the national level.

Figure 2.1: Estimated Adult HIV Prevalence (%) in India, 1990–2015 with Uncertainty Bound

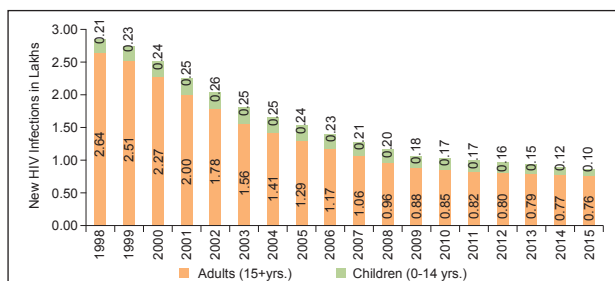


The total number of People Living with HIV (PLHIV) in India is estimated at 21.17 lakhs (17.11 lakhs–26.49 lakhs) in 2015 compared with 22.26 lakhs (18.00 lakhs–27.85 lakhs) in 2007. Children (< 15 years) account for 6.54%.

Undivided Andhra Pradesh and Telangana have the highest estimated number of PLHIV (3.95 lakhs) followed by Maharashtra (3.01 lakhs), Karnataka (1.99 lakhs), Gujarat (1.66 lakhs), Bihar (1.51 lakhs) and Uttar Pradesh (1.50 lakhs). These seven States together account for two thirds (64.4%) of total estimated PLHIV. Rajasthan (1.03 lakhs), Tamil Nadu (1.43 lakhs) and West Bengal (1.29 lakhs) are other States with estimated PLHIV numbers of 1 lakh or more. The estimated number of PLHIV in India has been more or less stable during 2013-15.

India is estimated to have around 86 (56–129) thousand new HIV infections in 2015, showing 66% decline in new infections from 2000 and 32% decline from 2007, the year set as baseline in the NACP-IV (**Figure 2.2**). Children (<15 years) accounted for 12% (10.4 thousand) of total new infections while the remaining (75.9 thousand) new infections were among adults (15+ years).

Figure 2.2: Estimated New HIV Infections in India, 1998–2015

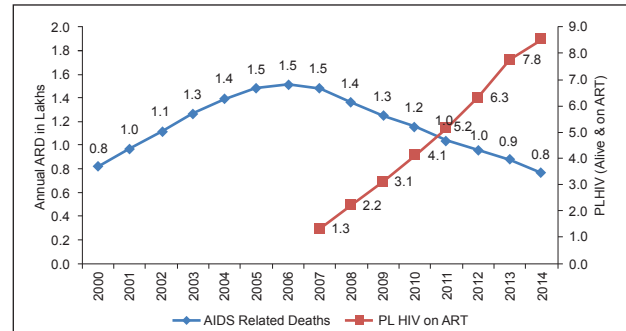


Andhra Pradesh & Telangana, Bihar, Gujarat and Uttar Pradesh currently account for 47% of total new infections among adults with each of these States contributing seven thousand five hundred or more new infections in 2015.

Since 2007, when the number of AIDS Related Deaths (ARD) started to show a declining trend, the annual number of AIDS related deaths has declined by 54%. In 2015 an estimated 67.6 (46.4–106.0) thousand people died of AIDS related causes nationally (**Fig. 2.3**).

This decline is consistent with the rapid expansion of access to ART in the country. It is estimated that the scale-up of free ART since 2004 has saved cumulatively around 4.5 lakhs lives in India until 2014.

Figure 2.3: Annual AIDS-related Deaths and ART Scale-up, India, 2000-14



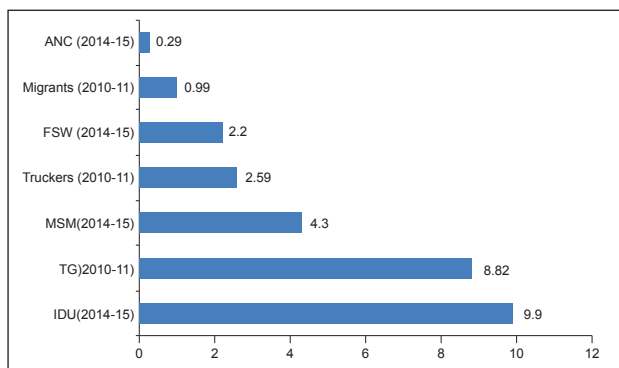
According to HIV Sentinel Surveillance (HSS) 2014-15, the overall HIV prevalence among ANC clinic attendees, considered a proxy for prevalence among the general population, continues to be low at 0.29% (90% CI : 0.28 - 0.31) in the country, with an overall declining trend at the national level (**Fig. 2.4**).

The highest prevalence was recorded in Nagaland (1.29%), followed by Mizoram (0.81%), Manipur (0.60%), Gujarat (0.56%) and Chhattisgarh (0.41%). Telangana (0.39%), Bihar (0.37%), Karnataka (0.36%) and Andhra Pradesh (0.35%) were other States which recorded HIV prevalence of more than the national average.

India continues to portray a concentrated epidemic. HIV prevalence among different risk groups is given in Figure below. National Integrated Behavioural and Biological Surveillance (IBBS) has estimated HIV prevalence among Female Sex Workers (FSWs), nationally, level at 2.2% (95% CI: 1.8 - 2.6). HIV Prevalence among MSM recorded at the national level was 4.3% (95% C I: 3.7 – 5.1) while among IDU, the prevalence of

HIV recorded among IDU at the national level was 9.9% (95% CI: 9.0 - 10.9).

Figure 2.4: HIV Prevalence (%) among ANC Client (HSS 2014-15), FSW, MSM, IDU (IBBS 2014-2015) & other risk groups (HSS 2010-11), India



24.3 TARGETED INTERVENTIONS (TI)

Targeted Intervention (TI) programme is one of the most important prevention strategies under NACP. TIs comprise of preventive interventions working with focused client populations in a defined geographic area where there is a concentration of one or more High Risk Groups (HRGs). The key high risk groups covered through Targeted Intervention (TI) programme include: Core High Risk Groups (HRGs) such as Female Sex Workers (FSW), Men who have Sex with Men (MSM), Transgender/Hijras (TGs), Injecting Drug Users (IDU) and Bridge Populations such as Migrants and Long Distance Truckers. People from high risk communities are engaged to deliver services and act as agents of change, linking services with commodities provision. TI projects provide a package of prevention, support and linkage services to HRGs through outreach-based services delivery model which includes screening for and treatment of Sexually Transmitted Infections (STI), free condom and lubricant distribution among core groups, Social Marketing of condoms, Behaviour Change Communication (BCC), creating an enabling environment with community

involvement and participation, linkages to integrated counseling and testing centers for HIV testing, linkages with care and support services for HIV positive HRGs, community mobilization and ownership building and specifically for IDUs, distribution of clean needles and syringes, abscess prevention and management, Opioid Substitution Therapy (OST) and linkages with detoxification/rehabilitation services.

The national programme continues to provide programme services to be made at the “doorsteps” of the HRGs adopting the peer led approach through partnering with NGOs/CBOs along with State AIDS Control Societies (SACS) and Technical Support Unit taking the role of mentoring and supervising the TIs.

Performance of TI Programme during 2015-16 (up to September 2015):

Coverage of core HRG group: The coverage data for core group HRGs is based on the periodic reports received at NACO, as depicted in Fig. 3.1 the key performance of TIs, shows that FSW coverage compared to the estimates has been the highest among the core groups (77.42%) and from last year coverage for TG has increased from 0.18 to 0.24 lakhs while for others it has slightly decreased.

Fig 3.1: Coverage of Core HRGs (FSW, MSM, IDU) during 2015-16 (Up to Sept 2015)

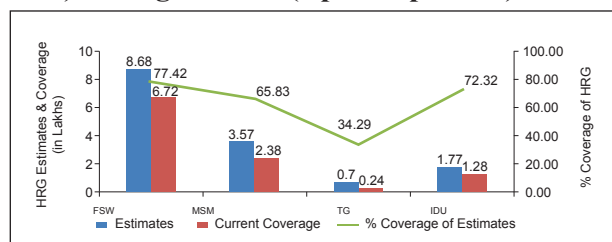
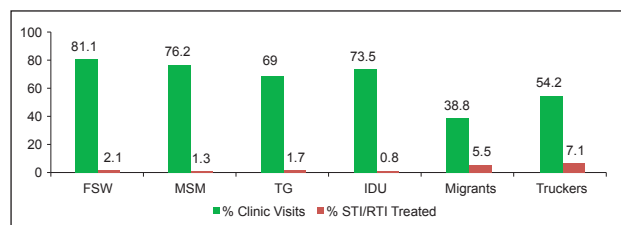


Fig. 3.2 showcases the number of clinic visits made by HRGs during 2015-16 (up to Sept. 2015) along with the proportion of STI clinic attendees diagnosed and treated for STI/RTI during 2015-16. The bridge population is showing higher number of

STI/RTI episodes vis-a-vis FSW/MSM/TG/ Hijra and IDU population. This is due to the fact that the NACO guidelines suggests that HRGs from core groups should visit STI clinics every quarter, especially for regular medical check-up and for treatment of Sexually Transmitted Infection (STI)/ Reproductive Tract Infection (RTI).

Fig 3.2: STI clinic visits during 2015-16 (Up to Sept 2015)



HIV testing and ART linkages among HRGs

As per the NACO guidelines all core HRGs should be tested for HIV once every six months. Fig 3.4 depicts the number of HIV tests performed among HRGs through referrals from targeted intervention projects. The graph depicts HIV testing done and HIV positivity rate for each typology during 2015-16. Amongst IDU, TGs and Truckers the HIV positivity is higher.

Fig 3.3: HRGs tested for HIV at ICTCs during 2015-16 (Up to Sept 2015)

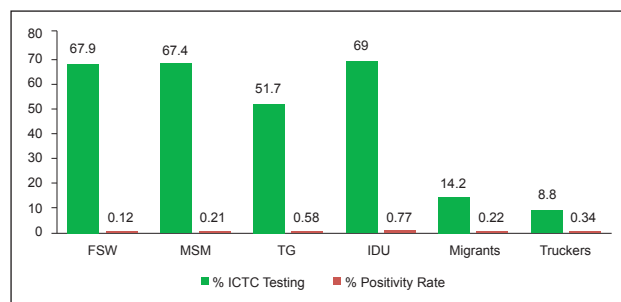
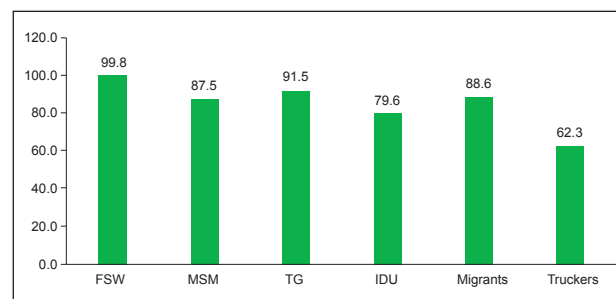


Fig. 3.4 depicts the PLHIV HRG linked to ART centers during the period 2015-16 (Up to Sept 2015). Due to the mobility of long distance truck drivers the percentage of HIV positive truckers being linked to ART centers is low at 62.3%, while

for other HRGs more than 80% of the PLHIV identified are linked to ART centers. As part of increasing the coverage especially amongst bridge group (where the % of HIV testing is hovering around 10-15%) community based testing is being experimented. This year HIV testing through TIs would focus and prioritise on the left out HRG population who could not access HIV testing facility at ICTCs even once as per old strategy. This should pave the way for ease of access for HIV testing facility for HRGs.

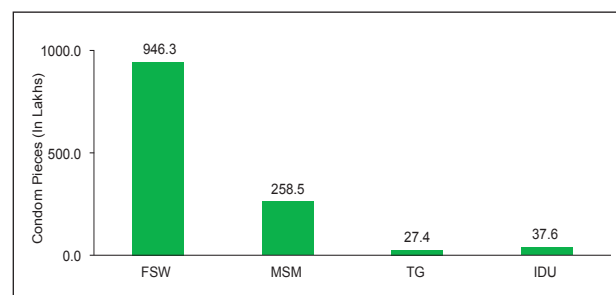
Fig 3.4: PLHIV (%) HRG linked to ART center during 2015-16 (Up to Sept 2015)



Condom distribution among HRGs

As part of the National programme a lot of emphasis is provided on keeping all sexual encounters protected by consistent and correct usage of condoms. To ensure this, condoms are distributed to HRGs as per their requirement. Fig 3.5 shows the typology-wise number of condoms (free and social marketing) distributed to the HRGs during 2015-16 (Up to Sept 2015).

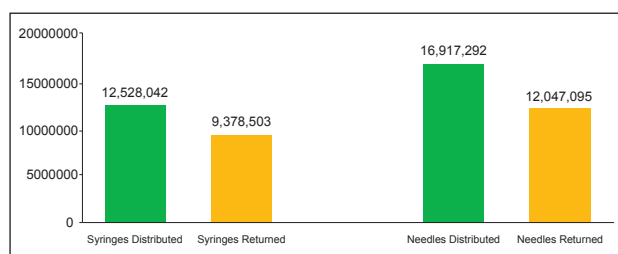
Fig 3.5: Typology-wise condom pieces distributed to HRGs during 2015-16 (Up to Sept 2015)



Needle & Syringe distribution patterns among Injecting Drug Users (IDUs)

As part of preventive services, Targeted Interventions for IDUs distribute free syringes and needles to Injecting Drug Users (IDUs) through peer educators and IDUs are encouraged to return the used syringes and needles. This ensures availability of sterile syringes and needles to IDUs and reduces possibility of sharing injecting equipment, thus decreasing risk for HIV transmission. **Figure 3.6** depicts the number of syringes and needles distributed to IDUs and the number of used syringes and needles returned by them during 2015-2016 (Up to Sept 2015).

Fig 3.6: Distribution and Return of Syringes & Needles, 2015-16 (Up to Sept 2015)



Capacity Building of TIs through State Training Resource Centers (STRCs)

Under NACP-IV, State Training & Resource Centers were envisioned to provide sustained support and enhance quality of interventions through training and developing the capacity of TI projects staff. State Training & Resource Centres (STRCs) work closely with the State AIDS Control Societies and Technical Support Units (TSUs) to build the capacity of the TI staff. While the new staffs are trained on the standardized modules, the old staffs are imparted customized trainings based on needs assessment carried out by STRCs. STRCs build and preserve

local resources to ensure that overall capacity of States improves with respect to programme processes, roles and responsibilities of TI staff.

12 STRCs are on board, covering 21 states as on August 2015, the rest are in the process of procurement which will be completed soon. The training calendar is designed by each STRC in consultation with SACS/TSU to carry out the training activities based on the training modules. During the FY 2015-16 (till October 2015), a total of 1139 TI staff were trained by STRCs and due to shortfall in training budgets at SACS and NACO level, trainings could not be prioritized.



Induction Training Programme for TI Programme Managers in Gujarat

Performance grading of Targeted Interventions

Technical Support Units (TSUs) conduct quarterly assessment of TIs on a comprehensive 18 indicator tool that assesses infrastructure, programme processes and service delivery. **Table 3.1** gives a comparative summary of the half yearly assessments conducted during the period April-Sept. 2014 and Oct 2014-March 2015. As seen in the table the qualitative aspect of TIs have increased as seen where the number of TIs in Good (B) and Very Good (A) category have increased from 860 to 1027 during the two six months period.

Table 3.1: Status of half-yearly assessments grading of TIs for the period April to September-2015

Name of the States/UTs	April - September 2015				
	Number of TI graded				Total number of TIs graded
	Poor (D)	Average (C)	Good (B)	Very Good (A)	
Ahmedabad	8	7	3	1	19
Andhra Pradesh & Telangana	1	26	84	46	157
Arunachal Pradesh	0	5	8	10	23
Assam	0	1	17	36	54
Bihar	0	15	13	2	30
Chandigarh	0	0	1	12	13
Chhattisgarh	1	6	14	20	41
Daman & Diu	1	4	1	1	7
Delhi	0	3	17	67	87
Goa	1	0	4	6	11
Gujarat	4	19	44	30	97
Haryana	30	9	10	4	53
Karnataka	4	10	41	66	121
Kerala	5	5	30	25	65
Maharashtra	5	32	62	54	153
Madhya Pradesh	6	14	28	21	69
Manipur	0	1	23	39	63
Meghalaya	2	2	5	0	9
Mizoram	2	1	24	9	36
Nagaland	0	0	18	35	53
Odisha	3	4	14	16	37
Puducherry	0	0	5	0	5
Punjab	0	3	19	43	65
Rajasthan	4	13	17	11	45
Sikkim	0	0	5	2	7
Tamil Nadu	2	3	28	41	74
Tripura	0	0	2	12	14
Uttarakhand	3	7	15	9	34
Uttar Pradesh	3	14	33	43	93
West Bengal	0	6	10	14	30
Total No. of TIs	85	210	595	675	1565
All India Percent Grading	5.4	13.4	38.0	43.1	100.0

Grading for Jammu and Kashmir, Jharkhand and Mumbai is not included for the period April to September 2015 in above table due to non-availability of data.

Table 3.2: State-wise and Typology-wise distribution of Targeted Interventions (TIs) supported by NACO during the FY 2015-16 (As on Sept. 2015)

S. No.	Name of the SACS/MACS	No of TIs functional	FSW	MSM	IDU	TG	Core Composite	Migrant (Destination)	Trucker
1	Ahmedabad	19	3	2	1	1	0	10	2
2	Andhra Pradesh	155	35	5	5	0	89	17	4
3	Arunachal Pradesh	28	4	1	4	0	13	6	0
4	Assam	54	31	2	6	0	11	2	2
5	Bihar	39	6	3	10	0	19	0	1
6	Chandigarh	13	4	2	2	0	1	3	1
7	Chhattisgarh	42	11	0	6	0	15	7	3
8	D&N Haveli	0	0	0	0	0	0	0	0
9	Daman & Diu	7	0	0	0	0	2	4	1
10	Delhi	88	36	12	15	8	0	13	4
11	Goa	15	6	3	1	0	1	2	2
12	Gujarat	99	11	13	2	1	32	34	6
13	Haryana	54	9	9	14	0	6	14	2
14	Himachal Pradesh	24	12	1	2	0	2	6	1
15	Jammu Kashmir	17	3	1	4	0	4	3	2
16	Jharkhand	32	22	2	3	0	1	1	3
17	Karnataka	124	63	28	4	2	3	18	6
18	Kerala	65	20	14	6	8	0	15	2
19	Madhya Pradesh	76	25	4	9	0	27	7	4
20	Maharashtra	180	54	8	3	5	31	65	14
21	Manipur	63	6	2	46	0	7	2	0
22	Meghalaya	10	3	0	4	0	2	1	0
23	Mizoram	37	1	1	23	0	8	4	0
24	Mumbai (MC)	48	17	8	3	5	0	13	2
25	Nagaland	53	2	3	30	0	16	1	1
26	Odisha	54	12	2	6	1	22	9	2
27	Puducherry	5	1	1	0	0	2	1	0
28	Punjab	66	14	0	23	0	20	5	4
29	Rajasthan	45	13	4	4	2	9	10	3
30	Sikkim	7	3	0	4	0	0	0	0
31	Tamil Nadu	74	13	11	1	2	37	6	4
32	Tripura	14	8	0	2	0	1	3	0
33	Uttar Pradesh	93	12	2	13	2	51	6	7
34	Uttarakhand	40	13	1	7	0	8	8	3
35	West Bengal	35	19	4	3	1	1	2	5
INDIA		1775	492	149	266	38	441	298	91

Table 3.3: State-wise and Typology-wise coverage of Key Risk Groups under the programme, 2015-16

(As on Sept 2015)

Name of the SACS	FSW	MSM	IDU	TG	Migrant (Destination)	Trucker
Ahmedabad	3,180	2,829	379	302	150,000	40,000
Andhra Pradesh	137,479	31,449	2,275	-	197,208	67,200
Arunachal Pradesh	3,680	513	2,277	-	30,000	-
Assam	15,748	2,895	2,373	258	20,000	15,000
Bihar	13,606	2,339	5,102	-	-	10,000
Chandigarh	3,948	2,500	1,143	92	30,000	10,000
Chhattisgarh	18,314	2,740	2,860	545	77,000	50,000
D & N Haveli	-	-	-	-	-	-
Daman & Diu	591	688	-	-	60,000	10,000
Delhi	42,749	13,237	9,770	6,672	180,000	50,000
Goa	3,511	3,063	264	-	20,000	10,000
Gujarat	23,144	25,030	716	1,191	331,000	76,000
Haryana	11,576	6,749	5,117	-	140,000	5,000
Himachal Pradesh	-	-	-	-	64,000	-
Jammu and Kashmir	1,145	198	874	-	21,000	20,000
Jharkhand	13,278	1,272	884	54	10,000	45,000
Karnataka	79,677	26,407	2,027	2,002	182,000	80,000
Kerala	21,749	14,417	3,106	2,622	150,000	20,000
Madhya Pradesh	21,918	7,885	5,774	-	82,000	50,000
Maharashtra	66,066	22,613	724	2,150	884,000	220,000
Manipur	5,713	919	19,754	-	15,000	-
Meghalaya	1,564	274	1,713	-	10,000	-
Mizoram	916	472	9,092	-	25,000	-
Mumbai	16,706	11,696	1,081	4,545	130,000	15,000
Nagaland	3,036	1,250	16,394	-	5,000	5,000
Odisha	10,281	4,705	2,123	-	92,000	-
Puducherry	1,801	1,934	-	-	12,000	-
Punjab	18,451	2,412	13,058	-	65,000	35,000
Rajasthan	13,052	4,538	1,326	563	100,000	20,000
Sikkim	881	-	927	-	-	-
Tamil Nadu	43,632	31,831	514	652	60,000	47,000
Tripura	4,555	169	448	-	15,000	-
Uttar Pradesh	21,893	8,262	13,330	2,355	60,000	95,000
Utarakhand	5,458	1,853	1,817	110	95,000	40,000
West Bengal	28,426	1,369	1,022	230	30,000	50,000
All India*	657,724	238,508	128,264	24,343	33,42,208	10,85,200

*These are provisional reports from states as some states are yet to reflect the coverage data.

Opioid Substitution Therapy (OST) Programme for IDUs

For providing and assuring quality services, a continuous process of capacity building is being followed under Opioid Substitution Therapy (OST) Programme for IDUs.

- The operational guideline on Opioid Substitution Therapy (OST) for clinical staff has been revised incorporating new development in the area.
- A training manual on special needs of Female Injecting Drug Users (FIDU) has been developed which aims to address the issue of FIDU.
- Quality Assurance Protocol (QAP-Medical) of Opioid Substitution Treatment in India (A reference guide for mentors) has been developed. The QAP serves as a resource material for mentors, entrusted with the task of carrying out periodic 'Quality Assurance (QA) visits' to OST centres.

Table 3.4: No. of OST centers

Number of OST Centers as on September 2015			
S. No	State	No. of the centers	No. of active clients being covered
1	Ahmedabad	1	20
2	Andhra Pradesh	1	36
3	Arunachal Pradesh	2	61
4	Assam	2	182
5	Bihar	2	158
6	Chandigarh	4	277
7	Chhattisgarh	4	416
8	Delhi	11	1,297
9	Goa	1	43
10	Gujarat	2	27
11	Haryana	9	582
12	Jammu and Kashmir	2	259
13	Jharkhand	2	251

Number of OST Centers as on September 2015			
S. No	State	No. of the centers	No. of active clients being covered
14	Karnataka	3	90
15	Kerala	10	328
16	Madhya Pradesh	7	490
17	Maharashtra	3	133
18	Manipur	23	2,129
19	Meghalaya	4	565
20	Mizoram	17	1,137
21	Mumbai	3	244
22	Nagaland	31	1,665
23	Odisha	3	115
24	Punjab	28	7,182
25	Rajasthan	2	48
26	Sikkim	3	128
27	Tamil Nadu	1	50
28	Tripura	3	194
29	Uttar Pradesh	11	891
30	Uttarakhand	5	253
31	West Bengal	8	376
Total		208	19,627

New Initiatives under Targeted Interventions

This year, several new initiatives were taken and prominence was given to utilize the technology to bring efficiency and arrest data impropriety in the programme. As part of the new initiative the following was done:

1. "Sustaining the HIV Prevention Impact among Key Populations" in the State of Andhra Pradesh, Telangana, Karnataka, Maharashtra and Tamil Nadu.

To strengthen and improve community institution, NACO is leading a focused initiative on Vulnerability Reduction and Community System Strengthening (CSS) to concentrate (87 CBOs in the southern states) on Andhra Pradesh, Telangana, Karnataka, Maharashtra and Tamil Nadu for Female Sex Workers programme. The project is

titled as “Sustaining the HIV Prevention Impact among Key Population”, and is operational in five states for 5 years from 2014.

2. Workshop with Law Enforcement Agencies

Strengthening enabling environment is imperative while scaling-up comprehensive HIV prevention, treatment, care and support services to injecting drug users including those who are living in prisons. In this context, NACO has organized the regional workshop for the North Eastern States in September 2015 in continuation of the consultative meeting with the Law Enforcement Agencies held at New Delhi under the chairmanship of Union Secretary (Health), Ministry of Health and Family Welfare (MoHFW). Key representatives from the Narcotics Control Bureau (NCB), Police Commissioners, Prison Authorities, Police Academies, State Health Department, etc. participated in the meeting. The approved Strategy on HIV/AIDS interventions in prison was also shared during the workshop.

3. Project Sunrise

Project Sunrise is the strategic plan developed to upscale HIV interventions in north eastern States of India for augmenting HIV/AIDS response and to curtail the rapid spread of HIV among the High Risk Groups (HRGs) and other vulnerable groups. The strategy was being adopted after a series of consultative meetings with all the stakeholders including the State AIDS Control Societies, State Health Missions, Community Members etc. of the region. The proposed State level plans assess the programmatic gaps and barriers; enhance capacity of state level institutions and improve the quality of IDU package of services amongst other initiatives.

4. Project NIRANTAR (Local Capacity Initiative)

Project Nirantar is a civil society capacity building for advocacy and response to the HIV/AIDS epidemic among key populations (Female Sex

Workers, Men having sex with Men, Transgenders/ Hijras and Injecting Drug User) in three States of Chhattisgarh, Madhya Pradesh and Odisha primarily focusing on building the Local Capacity Initiatives of TINGOs and SACS. The Goal is to enhance the capacity of CSOs (NGOs, CBOs implementing Targeted Intervention projects) and other local institutions to improve access to HIV prevention to care and treatment continuum services including social protection schemes in an enabling environment for KPs. The period for this project is from September 2014 to September 2017.

5. Migrant Interventions

As per NACP-IV strategy the migrant’s population are reached through Targeted Intervention at destination which is the place where migrants come for work and livelihood. The returnee migrants and their spouses are reached at Source villages through Source migrant intervention and periodical health and communication activities. In order to reinforce the prevention messages, the migrants are reached at the transit places which are places from where they board the train or bus to move between source and destination during their journey.

In addition to above, as large no. of migrant labourers which are linked with the industries either as employees or in the supply chains are serviced by the concerned industries under the Employer Led Model. 217 MoUs have been signed with various industries; it is expected to reach around 5.62 lakhs informal workers through these MoUs.

District AIDS Prevention and Control Units

There are 188 District AIDS Prevention and Control Units (DAPCUs) in A and B category districts spread across 22 states of the country for decentralized monitoring and providing programmatic oversight to the implementation of HIV programme. The DAPCUs are led by a District AIDS Control Officer, from the Government Health System and supported by

the District Programme Manager (DPM), District ICTC Supervisor (DIS) and District Assistants for Monitoring & Evaluation, Accounts and Programme implementation.

The main objective of DAPCU is overall monitoring coordination and troubleshooting for NACP facilities at district level, to develop evidence based district specific programme plan and build robust network with District Administration and line departments.

The DAPCU National Resource Team (DNRT) of the NTSU at NACO has been mandated to mentor the DAPCUs and provide support to SACS in review of DAPCU functioning and drawing up appropriate bottom up action plan for improvement of programme, in terms of scale and quality.

Capacity Building of DAPCUs

The DNRT, with support from CDC and VHS carried forward, training of remaining DAPCU staff in Rajasthan. In the training, DAPCU staffs are being trained on all NACP components. Between 14th to 17th October, 2015, 28 staff members from 7 DAPCUs in Rajasthan were trained. Training of remaining DAPCU staff in the States of Andhra Pradesh and Telangana is expected to complete by March 2016.

Key Activities of DAPCUs

In keeping with the key role of strengthening decentralization and building ownership of State and District Administration of NACP, 188 District AIDS Prevention and Control Units, have contributed in streamlining of SIMS reporting with 100% reporting in more than 90% DAPCU districts paving the way for effective and timely data analysis and drawing up strategic follow up action plan by SACS. DAPCUs have conducted 924 Monthly district level reviews of all NACP facilities, enabling reconciliation and strengthening of cross referrals from prevention to care & support

services. DAPCUs have ensured support of district administration in addressing challenges through quarterly meeting of District AIDS Prevention and Control Committee (DAPCC) chaired by the District Collector/Deputy Commissioner. 228 DAPCC meetings have been conducted in the first 2 quarters of 2015-16. DAPCUs ensured mainstreaming of NACP within the General Health set up by regular participation in 456 meetings with National Health Mission (NHM). DAPCU districts have achieved robust HIV-TB cross referral and linkage by conducting 805 HIV-TB coordination meetings.

DAPCU led single window approach for PLHIV/HRG linkage with Social incentive/benefit schemes: DAPCUs made concerted efforts in empowering PLHIV's access to various social benefits and protection schemes through coordination meetings with line departments and key stakeholders viz. PLHIVs/TI NGOs/CSC/Help Desk /District Level Network (DLN).

This has led to an uptake in access of various central and state sponsored schemes. To cite few instances DAPCU Rajkot, in Gujarat had facilitated the availing of educational scholarship by 235 HIV Infected and Affected students under the Foster Care and Approval Committee. Organized in collaboration with the Social Protection Officer, CSC/DLN & DAPCU Rajkot, Gujarat on 7th July 2015, 235 students were sanctioned scholarships of a total amount of INR 6 lakhs by the Committee. DAPCU Ahmadabad, in Gujarat facilitated availing of Medical Aid worth INR 16 lakhs to 562 PLHIVs under the Government sponsored Tabibi Sahai scheme during the FY 2015-16 (till October 2015).

24.4 LINK WORKER SCHEME (LWS)

Under NACP-IV, the Link Worker Scheme (LWS) has been designed to intensify and consolidate the prevention services focusing on at risk population in the rural areas with a mandate to work in 163 districts across 18 States of India. The

Link Worker Scheme aims to address complex needs of rural HIV prevention, care and support through identification and training of village level workforce of Zonal Supervisors, Cluster Link Workers and other stakeholders on issues of HIV/AIDS, gender, sexuality and Sexual Tract Infections (STI). The scheme envisages creation of demand for various HIV/AIDS related services, linking of the target population to existing services (as the scheme itself does not create any service delivery points), creating an enabling and stigma free environment, ensuring the target population continue to access information, services in a sustained manner, creating linkages with services of other departments through ASHA volunteers, anganwadi workers, panchayat heads etc.

The scheme involves highly motivated and trained community members – 20 Cluster Link Workers in each district for clusters of villages (usually 5 villages each) – responsible for establishing linkages between the community on one hand and information, commodities and services on the other. These Cluster Link Workers are supervised by 2 zonal supervisors in each district.

Table 4.1: Link Worker Scheme for the FY 2015-16 (till September 2015)

	Line-listed population	Contacted with non-clinical services	Covered with clinical services	Tested for HIV	Positive detected
High Risk Groups	1,06,467	65,933	39,078	30,478	55
Migrant	10,64,890	3,53,609	1,07,714	76,168	197
Other Vulnerable population	972,431	414,627	1,51,839	1,20,131	234
People living with HIV (PLHIVs)	31,186	17,791	7,318	NA	NA

High Risk Groups consist of Female Sex Workers (FSW), Men who have sex with men (MSM), Injecting Drug Users (IDUs) and Transgender (TG). During the said period, 61.93% of HRGs were contacted for one-to-one or one-to-group sessions

which involves sensitizing the beneficiaries about HIV/AIDS, STI, other health related issues and distribution of commodities. Apart from this, 28.63% of HRGs were tested for HIV, out of which 55 individuals were detected HIV positive. Among the migrants, 33.21% of migrants were contacted for one-to-one or one-to-group sessions or commodity distribution and 7.15% of migrants were tested for HIV, out of which 197 positive cases were found (**Table 4.1**).

Other vulnerable population consists of spouses of HRGs, spouses of migrants, spouses of trucker, pregnant women, TB patients, Truckers, youth with STI symptoms etc. Out of 972431 line-listed, 42.64% of same were contacted for one-to-one or one-to-group sessions or commodity distribution and 12.35% of this population were tested for HIV out of which 234 positive cases were detected. Under Link Worker Scheme, 31,186 PLHIVs are line-listed out of which 17,791 were contacted in the period April-September 2015.



Drug Abused Day 2015 observed by LWS Amritsar at Central Jail

24.5 SEXUALLY TRANSMITTED INFECTIONS (STI) AND REPRODUCTIVE TRACT INFECTION (RTI) CONTROL & PREVENTION PROGRAMME

Sexually Transmitted Infections (STI) and Reproductive Tract Infection (RTI) enhances chances of acquiring and transmitting HIV infection by 4 to 8 times; hence control and prevention of STI/RTI is a key prevention strategy for HIV. Early

diagnosis; appropriate and complete treatment of STI/RTI reduces the transmission rate of HIV infection by more than 40%. Syndromic Case Management (SCM), with minimal laboratory tests is the cornerstone of STI/RTI management under National AIDS Control Programme.

As per 2002-03 ICMR study, the programme estimates occurrence of 30 million episodes of STI/RTI every year in the country. NACO target is to manage 80 lakh episodes of STI/RTI in 2015-16, out of which the programme has achieved 48.48 (60.6%) lakhs till October, 2015.

Progress of STI/RTI Services

Expansion of STI/RTI Service in Government Health Facilities: Presently there are 1152 designated STI/RTI clinic (DSRC) supported by NACO with at least one DSRC per district in the country. The two arms of DSRC are: **a)** Obstetrics & Gynaecology OPD and **b)** STI OPD under Dermato-venereology clinics and provide services through existing public health care delivery system. NACO has provided support to these clinics to provide quality STI/RTI services through audio-visual privacy, furniture and instrument for conducting internal examination, provision of central supply of colour coded STI/RTI drug kits, RPR kits, consumable for conducting basic laboratory tests and computers for maintaining records and for monthly reporting through Strategic Information Management System (SIMS). Each of these clinics is also provided with one trained counsellor. A total of 18,72,391 RPR tests were conducted among attendees of DSRCs of which only 0.4% (7652) were reactive. Number of patients referred to the Integrated Council and Testing Centres (ICTC) were 16,30,294 of which 0.5% (8307) were found tested positive for HIV. Among the pregnant women attending antenatal care, 18,08,120 lakhs were screened for syphilis of which 0.15% (2738) were found reactive for syphilis and were provided treatment. The sero

prevalence of Syphilis is observed to be declining steadily among patients with STI/RTI, pregnant women and high risk groups.

Pre-packed STI/RTI colour-coded kits

The pre- packing of STI/RTI drug kits has helped to standardize the treatment. The colour coded STI/RTI kits have been provided for free supply at all DSRCs and TI NGOs. These colour coded drug kits are procured centrally by NACO and dispatched to all SACS for distributing to facilities for use. The pre-packaging of the drugs is being recognized as one of the global innovation in STI programme management. The drugs used to treat common STI/RTI are included in the National/State List of Essential Drugs.

Regional STI/RTI Training, Research and Reference Laboratories

There are 10 functional Regional STI training, reference and research laboratories supported & strengthened by NACO. These are located at:

1. Osmania Medical College Hyderabad;
2. Medical College Kolkata and Institute of Serology Kolkata;
3. Government Medical College Nagpur;
4. Government Medical College Baroda;
5. Institute of Venereology, Chennai;
6. Maulana Azad Medical College, New Delhi;
7. BYL Nair Hospital, Topiwala National Medical College, Mumbai;
8. Government Medical College, Guwahati, Assam;
9. Post Graduate Institution of Medical Education and Research, Chandigarh and
10. Safdarjung Hospital, New Delhi acts as the Apex Centre as well as Regional Laboratory for the country. The three STI labs at

Mumbai, Guwahati and Chandigarh are made functional from this year.

The key functions of these laboratories are to provide etiologic diagnosis of common STI/RTI syndromes, validation of syndromic diagnosis, monitoring of drug sensitivity of gonococci and implementation of Syphilis EQAS. Operational Research (OR) protocols of Chennai, Hyderabad, Baroda and Nagpur Centres were approved by NACO R & D TRG and Ethics Committee and Baroda and Nagpur centres have completed the activity and in report writing stage. The OR activity at the centres are mentored with the support from CDC through FHI360.

Based on recommendations of STI-TRG and evaluation team a national mentoring committee has been set up to strengthen and oversee the functioning of these centres and to monitor operation research activity.

In addition to 10 Regional STI labs, an additional 45 State STI training and reference laboratories have been identified and their staff trained. These centres function under the mentorship of linked regional STI laboratories and the network of STI labs will implement the STI surveillance protocol. An operational manual was drafted to facilitate and standardize State STI centres functioning. Each of these STI labs were assigned dedicated geographic areas and DSRCs, TI working in these areas are linked with the respective labs. These STI labs are entrusted to oversee the quality of syphilis screening as per national EQAS protocol. These labs will also investigate the congenital syphilis cases reported to programme in addition to monitoring sensitivity of Gonococci.

Training and Capacity Building and regular on site mentoring of STI/RTI service providers

Standardized training curriculum for doctors, staff nurse, laboratory technician and counselor is in

place. The training to these staff is provided in a cascade form through a cadre of national, state and regional resource faculties across all states. All faculty members have been trained using the same training material, following adult learning methods. The state and regional resource faculties in turn have conducted training of STI/RTI clinical staff in the designated clinic and TI NGO. A total of 2556 personnel were trained including 922 doctors, 542 staff nurses, 170 laboratory technicians and 922 preferred providers.

NACO has developed an integrated training module for counselors working at DSRC/ART/ICTC in consultation with TISS, Mumbai. In 6 batches 154 master trainers were trained on content and methodology. The newer training module is for 7 days instead of 12 days in the past, including one day for field visit. All the counsellors working at DSRC/ART/ICTC will be trained with this new comprehensive induction module during the FY 2015-16. Training schedules were prepared and states were informed.

Additionally each district has district resource faculties for training doctors, nurses and laboratory technicians on STI/RTI management for sub district health facilities (PHC, CHC and Sub-divisional Hospital). A total of 10799 person from sub-district health facilities were trained in syndromic case management which includes 3454 doctors and 7345 nursing staff.

Basics of STI programme activities were included in the curriculum developed for trainings of ANM at FICTC and laboratory technicians of ICTC, wherein the related curriculum has been incorporated into their existing curriculum so as to make service delivery comprehensive. To enable screening of pregnant women accessing labour room directly, a training module was designed to orient Labour room nurses for screening of direct walk in pregnant women both for HIV and Syphilis.

Convergence with NHM

STI/RTI services are also an integral part of services provided at all government health facilities including PHC/CHC. At each of these health facilities a standardized service delivery protocol is followed. Medical and paramedical staffs are trained, free STI treatment is provided to patients and monthly reports on STI/RTI indicators are reported by these facilities through existing HMIS.

Convergence has been strengthened at the national level through constitution of a joint working group and development of national operational framework for STI/RTI services delivery at sub-district health facilities. National operational guidelines and training modules for medical officers and paramedical staff for STI/RTI services have been developed jointly and disseminated. A joint convergence meeting between NACO and NHM is conducted once every quarter. STI curriculum is integrated in the training module for nurses and an integrated package of STI/HIV training is imparted by Indian Nursing Council for nursing staff as per the standardized curriculum.

NACO has revised national STI/RTI technical guidelines, 2014 in consultation with NHM.

Provision of STI/RTI Services in High Risk Group Population

The provision of a standardized package of STI/RTI services to High Risk Group (HRG) population is an important component of the Targeted Intervention projects. All the core group population receives packages of services which include:

- Free consultation and treatment for their symptomatic STI complaints;
- Quarterly medical check-up;
- Asymptomatic treatment (presumptive treatment) and
- Bi-annual syphilis and HIV screening.

Preferred Private Provider approach has been rolled out to scale up STI/RTI services to HRG population under TI Projects. These providers are selected by the community members through group consultation. This approach has enhanced access to services for the HRG. Under this approach, all the HRG receives free STI/RTI treatment and the providers receive a token fee of Rs.75 per consultation. A total of 3565 preferred provider are providing STI/RTI services to the HRG. All these preferred providers are trained using a standardized curriculum on syndromic case management. Colour coded STI/RTI drug kits have also been made available to these providers for free treatment of sex workers, MSM and IDU and data collection tools are also provided to them. A total of about 19.28 lakhs visits have been made by HRG and 13.72 lakhs regular medical check-up have been conducted. The involvement of private practitioners for providing STI services to HRG at such a large scale is one of the few successful initiatives globally.

Partnering with Organized Public Sector, Public Sector Undertaking and Professional Organization

The major proportion of patients with STI/RTI seek services from the vast network of private healthcare delivery systems ranging from freelance private practitioners to large public hospitals. Also, many are accessing services from public healthcare systems under other sectors like railways, ESI, armed forces, CGHS, port hospitals as well as health facilities of public sector undertakings like Coal India Ltd, SAIL etc. It has been felt that reaching out to maximum numbers of people suffering from STI/RTI is not possible without partnership with private sector and organized public sectors. NACO has initiated partnership with organized public sectors and private sectors through professional associations to support the delivery of STI/RTI services with the objective to reach the populations presently not

covered by the public healthcare delivery system. STI/RTI services have been rolled out in major Port hospitals, ESIC and Private Medical Colleges.

New Initiative under STI/RTI Programme

Elimination of Parent to Child Transmission (EPTCT) of Syphilis: The STI/RTI Division in collaboration with the Basic Services Division of NACO with Maternal Health Division under Ministry of Health & Family Welfare and WHO/SEARO has drafted National Strategy on EPTCT of Syphilis and launched this programme initiative in collaboration with the National Health Mission. Under the EPTCT of syphilis NACO and Maternal Health Division are aiming for early registration, early screening for both Syphilis and HIV and treat those found reactive, promote institutional delivery and follow up the new born up to 18 months of age.

Technical Resource Group for STI has met on 28th of September 2015 and recommended that STI programme to liaise with Non communicable division to expand screening for cervical cancer of women attending STI/RTI clinics, ART centres and female sex workers by strengthened referral linkages between these facilities and NCD clinics. TRG also recommended to explore feasibility and introduce vaccination for HBV and HPV to most at risk population by working together with Immunization division. It was further suggested that programme should work towards elimination of Chancroid and Donovanosis in-addition to congenital syphilis.

24.6 CONDOM PROMOTION PROGRAMME

Condom promotion by the Ministry of Health and Family Welfare, Government of India has a long history. In the initial period, condom was promoted under National Family Planning Programme. With the emergence of HIV as a serious health threat, promotion of condom for preventing HIV/AIDS was taken up under National AIDS Control Programme (NACP). With nearly 88% of HIV infection transmitted through unsafe sex,

significant efforts have been made by NACO to increase the awareness and usage of condoms to prevent the transmission of HIV/AIDS.

NACP has consistently focussed on prevention from HIV/AIDS through safe sex practices. Given the significant role of condoms in the prevention of STI/HIV infections, the NACO promotes condom use for controlling the epidemic.

In view of the prevailing status regarding condom usage in the country, a well-focused national level condom programme was implemented that comprised of social marketing of condom and free distribution among the most vulnerable ones. The desired behavioural outcomes of the condom programme are to increase consistent use of condoms among men with the non-regular sexual partners or in commercial sex encounters and among married couples for preventing unwanted pregnancies.

Targeted Condom Social Marketing programme (CSMP)

NACO targeted Condom Social Marketing programme focuses on providing easy accessibility of condoms. The coverage and sustainability of non-traditional outlets is enhanced as they facilitate easy accessibility of condoms in rural and far flung areas. The programme also focus on saturation of high risk areas i.e. truckers halt points and TI sites. All kinds of condom selling outlets located around these high risk areas are also covered in systematic approach under CSMP.



Non-traditional outlets selling condom

NACO has successfully implemented the last phase of its targeted Condom Social Marketing Programme in six States in North East region during the period June 2014 to May 2015. The current programme phase was concluded on June 30th 2015 in states that include Assam, Manipur, Nagaland, Tripura, Meghalaya and Mizoram. Condom Social Marketing Programme was also implemented and concluded in Karnataka, Rajasthan, Gujarat, Maharashtra, Odisha and West Bengal.

Overall 171 districts comprising of 99 High Prevalence High Fertility (HPHF), 38 High Prevalence Below Fertility (HPBF) and 34 Low Prevalence High Fertility (LPHF) districts were covered under this phase of CSMP. Under this phase of Condom Social Marketing programme, the total condom sale has been recorded as 2.8 crores till October 2015. This condom sale was achieved through servicing of more than 1.17 lakhs retail outlets spread over all programme states during this period (**Table. 6.1**).

Table 6.1: Condom sales and outlet coverage in 2015-16 (till October 2015)

Total Condom Sales (pcs)	2,83,50,723
Total Outlets Serviced (nos)	1,16,657

Condom Demand Generation

NACO continued to follow its communication framework devised under the current strategy adopted for long term that is based on promoting condom use by enhancing self-risk perceptions. The primary objective is to motivate the behaviour change among the key target population like high risk groups, bridge population as well as general population especially the youth as a category. Under this strategy, all condom promotion communication activities were developed to focus on to bring about positive behaviour change towards consistent condom use. These promotions are designed to promote condoms for its benefits of triple protection from the risks of HIV/AIDS,

STI and unwanted pregnancy.

NACO promotes safe sex and regular condom use through its campaigns on mass media. These condom promotion campaigns on mass media are aired on national networks of Doordarshan, leading cable & satellite channels, All India Radio and private FM channels to ensure countrywide footprints. This year, a new mass media campaign was developed in Hindi and other regional languages.



New Mass Media Campaign in Hindi

The new campaign is based on theme of ‘making regular condom use a habit’ to ensure its consistent use. The basic premise of this communication is to encourage audience to adopt safe sex practice by using condom every time. This campaign has been developed in two parts depicting various common incidents and events occurring in daily life of ordinary individuals. The essence of each of these episodes is to highlight benefits of good habits and thus appealing for making condom use a habit in order to play safe while having sex.

This campaign was conceived to be an integrated one encompassing compatibility across various media platforms including television, radio, outdoor, social media sites on the internet, mid-media activities, leaflets and merchandise as promotion material for display at the points of purchase.

The digital cinema screening was also included in condom campaign media plan to reach out to the target population through cinema halls of smaller towns. Only those cinema halls were shortlisted which are located in priority districts.

Optimization of Free Supply of Condoms

Another key objective of the NACO condom programme is to optimize the supply of free condoms to ensure availability to the vulnerable population and minimize the wastage of free condom. NACO, with the assistance of Technical Support Group (TSG) - Condom Promotion, has adopted multi-pronged strategy to increase the efficiency of distribution system at various stages in distribution chain which includes:

- Regular tracking of free condom supply received from Ministry of Health & Family Welfare to State AIDS Control Societies (SACS) every month to avoid stock out situation at SACS.
- Free condom supply analysis from SACS to TI-NGOs and subsequent distribution from various TI-NGOs to Most at Risk Populations (MARPs).
- Free condom annual demand estimation as done at TI-NGO and SACS levels based on previous data analysis.

The annual condom demand is estimated at SACS based on High Risk Group (HRGs) coverage, past condom usage trends and reviews of existing inventory of free condoms at SACS as well as at TI-NGOs covered by SACS. This results in managing available stock in accordance with the projected estimates of free supply of condom requirements as received from the respective SACS.

In order to ensure the free condom availability at various State AIDS Control Societies (SACS), NACO initiated inter-state transfers of free condom

stocks from the states where excess or relatively higher stock inventories were available to other SACSs. Similarly, NACO in close collaboration with respective SACS explored availabilities of free condoms under National Health Mission (NHM) and stocks were transferred from NHM to SACS wherever feasible.

On the other hand, intensive efforts by NACO to induce participation from private organisations also led to increased availability of condoms for free distribution. In this direction, the total 12 lakhs condoms have been committed by private organisation for donation. NACO also ensured concerted social marketing efforts at outlets situated in and around TI sites which could compensated the demand for free condoms to some extent.

Capacity Building

Regular induction and orientation sessions were organized to provide guidelines and road map to TI NGOs and CBOs towards effective implementation of condom training programme. These capacity building sessions are aimed at reaching out to TI-NGOs for training their Project Managers, Counsellors, M&E Officers, ORWs and PEs to enhance their knowledge and bring clarity in their roles and responsibilities towards condom programming. These sessions also help them to adapt to contemporary systems and tools like scientific forecasting of condom demand, effective distribution of condoms to maximize the use of condom and inventory management. Besides, it also helps to build confidence of TI staff in addressing key barriers in condom usage dispelling myths and misconceptions associated with condom use. Overall 395 TI NGOs including core TIs, Bridge, Pehchaan & LWS were trained across 29 States till October 2015.

24.7 BLOOD TRANSFUSION SERVICES

The annual requirement of blood for the country

is estimated at 12 million units of blood and the endeavor is to meet the blood needs of the country through voluntary non-remunerated donation through a well-coordinated and networked blood transfusion service.

An important Supreme Court judgment of 1996 mandated creating of National Blood Transfusion Council and directed stopping of professional blood donation. The National Blood Transfusion Council (NBTC), the apex policy making body for issues pertaining to blood and plasma and for monitoring of blood transfusion services is a part of National AIDS Control Organization. Government of India adopted the National Blood Policy in April 2002 which aims to develop a nationwide system to ensure easy access to adequate and safe blood supply. An Action Plan on Blood Safety was formulated by the Governing Body of National Blood Transfusion Council to address all the objectives of the National Blood Policy.

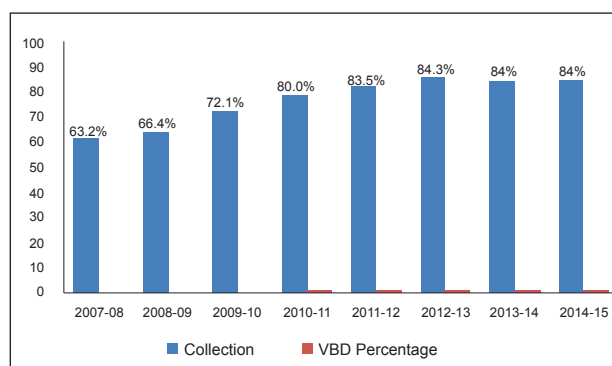
Current Scenario

The blood transfusion services comprise of 2760 licensed blood banks across all states and sectors, of which a network of 1,161 blood banks, including 304 Blood Component Separation Units (BCSU) and 34 Model Blood Banks, 210 Major Blood Banks and 613 district level blood banks are further supported by NACO by way of equipments, manpower and consumables.

NACO has been primarily responsible for ensuring provision of safe blood for the country since 1992. During NACP, the availability of safe blood increased from 44 lakh units in 2007 to 100 lakh units by 2014-15. During this phase, incidence of donor HIV sero-reactivity has declined from 1.2% to less than 0.2% in NACO supported Blood Banks. NACO supported blood banks are functional across the country in all barring 72 districts, but access to safe blood continues to be limited especially in rural areas in states like

Uttar Pradesh, Uttarakhand, Jharkhand, Bihar, Chhattisgarh. Till Sept. 2015, 28.4 lakh units were collected among these NACO supported Blood Banks, 78% of these blood units were collected through Voluntary Blood Donation (VBD). HIV sero-reactivity has remained low in tune of 0.14% in these blood banks.

Table 7.1: Units Collected and VBD Percentage in NACO Supported Blood Banks



Government has adopted a comprehensive approach towards strengthening blood transfusion services, key strategies for which include:

- Increasing regular voluntary non-remunerated blood donation to meet the safe blood requirements of safe blood in the country;
- Promoting component preparation and availability along with rational use of blood in health care facilities and building capacity of health care providers to achieve this objective;
- Enhancing blood access through a well networked regionally coordinated blood transfusion services;
- Establishing Quality Management Systems to ensure safe and quality blood and
- Building implementation structures and referral linkages.

National Blood Transfusion Council (NBTC)

The primary function of NBTC as the policy formulating apex body in relation to all matters pertaining to operation of blood centers is as follows:

- Commitment to provide safe and adequate quantity of blood, blood components and blood products through an organized blood transfusion service in the country;
- Formulate and implement National Blood Policy and implement National Blood Programme in the country;
- Make latest technology available for operating the blood transfusion services and encourage the appropriate use of blood and blood product and encourage the research and development of field transfusion medicine and related technology and
- Take adequate regulatory and legislative steps in blood transfusion steps and provide adequate resource policy framework of blood bank services in the country.

NBTC and SBTC are the apex bodies responsible for blood transfusion services at national and state level. They are supported by National and State Transfusion Services Core Coordination Committee created in compliance to directions of governing body of NBTC in its 24th meeting held in January 2014.

The 25th meeting of Governing Body of NBTC was conducted on August 5, 2015 with following major policy decision:

- Standardized policy guidelines for SBTC for set up of new blood banks, grant of No-Objection Certificate and status of Regional Blood Transfusion Centre;
- Policy on permitting transfer of blood units and blood components between blood banks and

- Approval of exchange value of plasma and guidelines for sending plasma for fractionation.

These decisions of National Blood Transfusion Council, will specially step up the utilization and availability of negative and rare blood group units and support disaster management and enable utilization of surplus plasma available with blood banks for fractionation to reduce import dependence for plasma derived medicines.

Promotion of Voluntary Blood Donation

It has been recognized world over that collection of blood from regular (repeat) voluntary non remunerated blood donors should constitute the main source of blood supply. The definition of Voluntary Blood Donor has been revised as per recommendations of NBTC governing body to exclude family donors. Special days such as World Blood Donor Day and National Voluntary Blood Donation Day were observed at national and state level recognizing the contribution of repeat non-remunerated repeat voluntary blood donors. 14th June 2015 was celebrated as World Blood Donor Day with theme 'Thank you for saving my life'. The celebrations were marked by the presence of Joint Secretary NACO along with other dignitaries including Secretary General IRCS, WHO representative to India and Country director of CDC.



World Blood Donor Day with theme 'Thank you for saving my life'

During the celebrations, awards were given to organisations who have contributed voluntarily to IT enabling of blood transfusion services. A mobile app to locate the nearest blood bank was launched on 14th June 2015 by the National Blood Transfusion Council (NBTC) in collaboration with National Health Portal (NHP), Ministry of Health and Family Welfare.

National Voluntary Blood Donation day was observed on 1st October 2015 by all states with the Theme – “Blood Donors bring a ray of Hope, Be a regular Blood Donor.”



National Voluntary Blood Donation day

A national level short film contest was held from June - September 2015. More than 800 participants submitted 2-3 minutes short films to promote voluntary blood donation. There were submissions in regional languages with English subtitles and also participation from across the borders. The sensitization of public at large to this humanitarian cause of Blood donation was seen in this enthusiastic response in participation.

In addition, State Blood Transfusion Councils also receive support to conduct activities for promotion of voluntary blood donation and conduction of Blood Donation Camps.



Blood Donation Camps

New initiatives under Blood Transfusion Services

2711 out of 2760 (98.22%) blood banks across the country are enrolled on Digital Platform – The NHP site provides location and contact details along with GPS coordinates of these blood banks. This serves to locate the nearest blood bank across the entire country on the NBTC microsite at NHP portal as well as a mobile app on Android platform.

A successful pilot study was conducted from 16th August - 15th September to assess the feasibility of display of stock availability on the same application in Delhi and Mizoram. 100% blood banks of Mizoram and 91% blood banks of Delhi reported their daily blood stock status to NBTC, proving the operational feasibility of the application even in far flung difficult terrains despite the fact that internet facility is not always available within the blood bank premises. This endeavour is scalable across all the licensed blood banks of the country and would enable the community at large to have authentic information.



Scheme for Modernization

Scheme for modernization of blood banks has been an integral part of all three phases of NACP through provision of one time equipment grant to selected blood banks in government and charitable sector for collection, testing and storage, as well as annual recurrent grant for support of manpower, kits and consumables. Total NACO supported blood banks increased to 1137 in 2013-14 to 1161 in 2014-15.

Model Blood Banks

Model Blood Banks help to improve upon the standards of blood transfusion services and function as demonstration centers for the States. 34 model blood banks continue to function across the country. These were made functional in 2010.

Blood Component Separation Units (BCSU)

In order to promote rational use of blood, BCSU

are established as an active part of BTS. Practice of appropriate clinical use of blood amongst the clinicians has seen a definite rise due to the increased component preparation and usage during seasonal epidemics and training of clinicians on rational use of blood. At present, component separation is around 60%.

Major Blood Banks (MBB) and District Level Blood Banks (DLBB)

Government and charitable blood banks collecting less than 5000 units per year are supported as MBB and DLBB in various districts of the country.

Blood Transportation Vans

Blood needs to be transported under proper cold chain maintenance from the linked mother blood bank to the Blood Storage Centre (BSC). NACO has provided 250 refrigerated blood transportation vans to the RBTC/District blood banks, which are being maintained through provisioning of fuel & manpower cost. These vans transfer blood units to the BSC on a regular basis and also on demand/emergency situations.

Capacity Building, Quality Management and Research

Education and training is fundamental to every aspect of Blood Transfusion Services. 3 Apex and 15 other centers have been identified across the country as training centers to impart training on all aspects of blood transfusion services involving Blood Bank Medical Officers, Technicians, Counselors, Nurses, Clinicians, Donor Motivators and Programme Officers of SACS. The blood transfusion services training programme aims to:

- Strengthen national capacity in education and training in all aspects of blood transfusion and voluntary blood donation;
- Support the establishment of sustainable national education and training programmes in blood transfusion and

- Strengthen inter and intra-regional collaboration in training in blood transfusion between NACO and its Collaborating Centers, national blood transfusion services, education and training institutions and NGOs.

The following modules were revised and printed to have uniform training curriculum across all training centres, which were field tested in a national level workshop held in February 2015 at Mahabalipuram:

- Training Module for Blood Bank Medical Officers and Lab Technicians;
- Training Module for Blood Bank Nurses;
- Handbook on Component Separation for BCSU;
- Facilitator’s Guide for Blood Bank Medical Officers (Non-BCSU);
- Facilitator’s Guide for Blood Bank Lab Technicians and BCSU Medical Officers and
- Facilitator’s Guide for Blood Bank Nurses.



Training Modules of Blood Bank

Three regional trainings for all training institute

faculty to orient them to the revised modules and training methodology were conducted in June and July 2015, after which trainings for doctors, nurses and laboratory technicians have been rolled across all states. The training programme for all the above is on-going as per the revised standardized curriculum all across the country. Till September 2015, 13 trainings have been completed.



Regional Trainings

The focus of BTS is to ensure access to safe and quality blood and blood products in the country. In order to plan and develop appropriate strategies, programmes and policies related to BTS, knowledge on the requirement of blood in the country is essential. Looking towards the need of the estimation of the blood requirement in the country, it was proposed to undertake the “Estimation of National Blood requirement in India” through CDC- CMAI project. The protocol for the study was designed with assistance from National Institute of Medical Statistics, CMC Vellore and other transfusion Medicine experts. The pilot study has been conducted till date.

Monthly programmatic data from all blood banks is reported on Strategic Information Management System (SIMS) on a web based format to National AIDS Control Organization. Presently, more than 2000 blood banks are registered and reporting on SIMS. The information procured and data generated from SIMS forms the backbone for spelling out the Annual Action plans and programme management. India is amongst the very few countries that have

such a comprehensive national level reporting in transfusion services

Monitoring and supervision of Blood Transfusion Services (BTS)

State Transfusion Services Core Coordination Committee teams have been constituted in every state to carry out the periodic supervision of all NACO supported blood banks and voluntary blood donation camps. Standardized supervisory tools and reporting formats are developed and officers from BTS division of NACO have visited 16 states and supervised 55 blood banks to facilitate their functioning as per NBTC guidelines.

The National Blood Transfusion Council is mandated with the task of regular review and monitoring of blood transfusion services of the country. In this regard quarterly visits by the officers from NACO/NBTC are conducted in different States and regions with the following objectives:

- Assess current situation of BTS infield practice;
- Perform gap analysis from recommendation and existing practices;
- Programme planning;
- Review programme implementation;
- Provide necessary support, capacity building and mentoring to program and field personnel and
- Review the functioning of SBTC.

During the FY 2015, the states visited include Uttar Pradesh, Punjab, Uttarakhand, Jammu & Kashmir, Chandigarh, Odisha, Chhattisgarh, Maharashtra, Tamil Nadu, Puducherry, Assam, Jharkhand, Rajasthan, Kerala, Himachal Pradesh and Mizoram which received guidance for strengthening Blood Transfusion Services.

Metro Blood Banks

It is proposed to set up four state-of-the-art Centres of excellence in Transfusion Medicine in Chennai, Delhi, Kolkata and Mumbai. First phase of project has been approved by Hon'ble Minister for Health and Family Welfare for two such centres and memorandum of understanding is to be signed with respective state governments.

Plasma Fractionation Centre

It was proposed to set up a Plasma fractionation centre at Chennai with a capacity of processing 150,000 litres of plasma per annum and prepare plasma products for use within the country. Keeping in view that large volume of unutilized plasma is being discarded; plasma policy has been formulated, as an addendum to national blood policy, so as to utilize this plasma by existing fractionators. NBTC has also approved modalities including exchange value for plasma exchange with indigenous fractionators.

24.8 BASIC SERVICES DIVISION (BSD)

The Basic Services Division of the National AIDS Control Organisation provides HIV counselling and testing services for HIV infection, the critical first step in detecting and linking people with HIV to access, treatment cascade and care. It also provides an important opportunity to reinforce HIV prevention. The national programme is offering these services since 1997 with the goal to identify as many people living with HIV, as early as possible (after acquiring the HIV infection), and linking them appropriately and in a timely manner to prevention, care and treatment services. The introduction of ART services for people living with HIV/AIDS in 2004, gave a major boost to counselling and testing services in India. The HIV counselling and testing services include the following components:

- I. Integrated Counseling and Testing Centres (ICTC)

II. Prevention of Parent-to-Child Transmission of HIV (PPTCT)

III. HIV/Tuberculosis collaborative activities

Diverse models of HIV Counselling and Testing services are available to increase access to HIV diagnosis; these include testing services in healthcare facilities, standalone sites, and community-based approaches at various levels of public health systems in India from State, District, Sub-district and village/community levels.

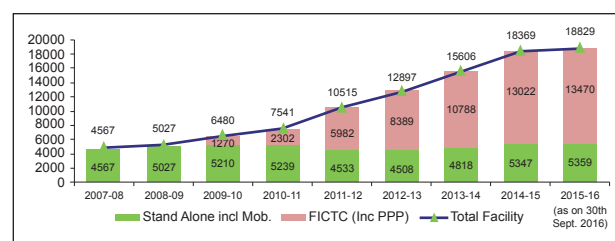
I. Integrated Counselling and Testing Centre (ICTC)

Types of facilities for HIV counselling and testing services: There are different types of HIV counselling and testing services in India which include Standalone ICTC (SA-ICTC), Mobile ICTC, Facility Integrated Counselling and Testing Centres (F-ICTCs) and Public Private Partnership & ICTCs (PPP & ICTCs). In order to offer HIV testing to every pregnant woman in the country, so as to detect all HIV positive pregnant women and eliminate transmission of HIV from parent to child, the community-based HIV screening is conducted by frontline health workers (Auxiliary Nurse Midwives) at the Sub-Centre level.

During 2015-16 (till September 2015), 107 new ICTC staffs have received induction training and 11 have undergone refresher training. In addition to these, 1039 ICTC staff (medical & paramedical) were received sensitization training on different ICTC components viz. HIV-TB, PPTCT, EID, Whole blood screening etc.

There is an increase in the number of ICTCs in the country, clearly portraying integration of counselling and testing services under general health services, increase in geographical coverage of these services below block level, better accessibility and addressing sustainability (**Fig 8.1 below**).

Fig 8.1: Scale-up of ICTCs during the period from 2007-08 to 2015-16 (till September 2015)



II. Prevention of Parent to Child Transmission of HIV (PPTCT)

The Prevention of Parent to Child Transmission of HIV/AIDS (PPTCT) programme was started in the country in the year 2002. Currently there are more than 18,000 ICTCs in the country which offer PPTCT services to pregnant women. The aim of the PPTCT programme is to offer HIV testing to every pregnant woman (universal coverage) in the country, so as to cover all estimated HIV positive pregnant women and eliminate transmission of HIV from mother-to-child. During the FY 2015-16, NACO has decided to implement EID service through 5,237 SAICTCs (fixed) all over India.

In India, PPTCT interventions under NACP started in 2002 using single dose Nevirapine prophylaxis for HIV positive pregnant women during labour and also for her newborn child immediately after birth. With the National AIDS Control Organisation adopting “Option B” of the World Health Organisation (WHO) recommendations (2010), India has also transitioned from the single dose Nevirapine strategy to that of multi-drug ARV prophylaxis from September, 2012. In the beginning stage, this strategy was executed in the three southern high HIV prevalence States of Andhra Pradesh, Karnataka and Tamil Nadu. The National Strategic Plan for PPTCT services using multi-drug ARVs in India was developed in May-June 2013 for nationwide implementation in a phased manner. Based on the new WHO guidelines (June 2013) and on the suggestions from the Technical

Resource Groups during December 2013, NACO is implementing lifelong ART (using the triple drug regimen) for all pregnant and breastfeeding women living with HIV, regardless of CD4 count or WHO clinical stage or duration of pregnancy, both for their own health and to prevent vertical HIV transmission and for additional HIV prevention benefits. In December 2013 the Basic Services Division published the “Updated guidelines for Prevention of Parent to Child Transmission of HIV using Multi-drug Anti-Retroviral Regimen in India” and the National Strategy Plan for its roll-out in a phased manner. The NACO is implementing lifelong triple ARV drugs to pregnant women infected with HIV, irrespective of CD4 count nationwide, w.e.f January, 2014.

The comprehensive ICTC/PPTCT package of services is depicted below:

- **Counselling and Testing Services of General Clients:** During the FY 2015-16, the number of ICTCs offering HIV counselling and testing services went up to more than 18,000 centres in India (Standalone ICTCs including FICTC & PPP & ICTCs). About 68.5 lakhs general clients were tested for HIV in April - September 2015, out of against the annual target of 124 lakhs and out of which 88,642 general clients were detected HIV positive.
- **Counselling and Testing of High Risk Groups and STI Clinic Attendees:** Intensifying and consolidating prevention services, with focus on HRGs and vulnerable populations is one of the key strategies of NACP IV. Guidelines on targeted interventions specify that all core groups and high risk groups should be tested for HIV once every six months. In India 7.34 lakhs HRGs and 4.3 lakhs STI Clinic attendees were tested for HIV during the FY 2015-16 (till September 2015).

Prevention of Parent to Child Transmission of HIV services (PPTCT)

a) Detection of HIV infected pregnant women and children

Government of India is committed to work towards achievement of the global target of “Elimination of new HIV infection among children” by 2015. National AIDS Control Organisation is implementing lifelong ART (triple drug regimen) for all pregnant and breastfeeding women living with HIV, regardless of CD4 count or WHO clinical stage or duration of pregnancy, both for their own health and to prevent vertical HIV transmission and with additional HIV prevention benefits.

In the FY 2015-16 (till September 2015), out of the target of 90 lakhs pregnant women, 53.2 lakhs were tested for HIV. Among total tested, 5856 (included known HIV positive) were found HIV positive. Out of that, 5711 (97.5%) were initiated on lifelong ART. And out of total 4202 HIV exposed babies, 4088 (97%) received NVP prophylaxis for a minimum period of 6 weeks.

b) Early Infant Diagnosis (EID)

HIV exposed infants born to infected pregnant women have to undergo DNA-PCR tests using dried blood spot and whole blood specimen. Details on EID programme are mentioned in the section on Laboratory Services.

During the FY 2015-16 (till September 2015), total 5286 HIV exposed babies were initiated on CPT and 5796 babies were tested under the EID Programme and out of that, 4011 (69.2%) were tested using DBS DNA PCR & 1785 (30.8%) were tested using antibody at first visit. During the FY 2015-16 (till September 2015), 216 (3.7 %) babies were found to be reactive with DBS DNA PCR test and 51 babies had undergone confirmatory PCR test & 106 were initiated on Pediatric ART.

III. HIV/TB Collaborative Activities

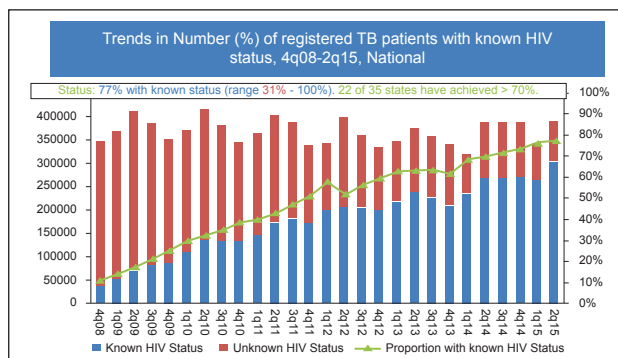
TB disease is the commonest opportunistic infection among HIV-infected individuals. Further it is also known that TB being a major public health problem in India accounts for 20-25% of deaths among PLHIV. It is known that nationally about 5% TB patients registered under the Revised National Tuberculosis Control Programme (RNTCP) also have HIV infection. In high prevalent states and districts, positivity among TB patients is more than 10% and is as high as 40% in selected districts. Thus, while the country is dealing effectively with HIV burden, TB associated HIV epidemic is posing a great challenge.

Broadly the national HIV/TB response includes intensified TB case finding at HIV care settings, intensified TB-HIV package and strategy for TB prevention among PLHIV.

These activities are closely guided through duly constituted National HIV-TB Coordination Committee, National Technical Working Group and State and District Level Coordination Committees.

National AIDS Control Organization and Revised National TB Control Programme has been successful in increasing access and uptake of HIV testing and counselling for all TB patients.

Fig 8.2: Trends of Number of registered TB patients with Known HIV status (%), 4th quarter 2008 to 2nd Quarter 2015



The trend of known HIV status is increasing, in 2014-15, out of the total 1517728 registered cases,

1083527 of TB patients i.e. 71% knew their HIV status. During 2015-16 (till June 2015) it has increased up to 77% (i.e. out of 3,92,242 registered TB cases 3,02,026 TB patients know their HIV status (Fig 8.2). In 2014-15 there were 13,654 Designated Microscopic Centres (DMCs) with 9179 co-located HIV/TB testing facilities i.e. 67% and now out of 13654 DMCs 9558 are collocated in the country till June, 2015 i.e. 70%. The linkage of TB HIV co-infected patients to CPT and ART is also showing increasing trend in India. 93% of co-infected patients received CPT in 2014-15 and 91% of co-infected patients received ART in 2014-15.



Innovative mechanism of "Missed call number" at the back of the strip for tracking patients pill intake and treatment adherence

Quality Improvement Initiatives under Basic Services

Technical Resource Groups (TRG) meeting on PPTCT: In the FY 2015-16, PPTC TRG meeting, was conducted in the month of September 2015 to review the key operational and service delivery issues pertaining to PPTCT of HIV, Syphilis, and EID programme in the country and discussed the strategies towards universal coverage of HIV & Syphilis testing among pregnant women. The TRG meeting on ICTC is going to be conducted in the month of December 2015.

Quality assurance and EQAS: The diagnostic services provided through ICTCs across the country are strictly monitored by a strong Internal and External Quality Assurance Scheme (EQAS).

Supervision and Monitoring Mechanism

Officers from NACO along with the State AIDS Control Societies and partners visit States/UTs and

service delivery centres as part of routine monitoring. During 2015-16, NACO officers visited the States of Karnataka, Madhya Pradesh, West Bengal, Rajasthan, Maharashtra, Chhattisgarh, Telangana, Andhra Pradesh, Uttarakhand and Delhi.

Review meetings

The Basic Services Division conducts review meetings on BSD components at regular intervals both at National and State level. State AIDS Control review meetings, PPTCT review meeting, National TB HIV Joint review meetings, National TB HIV Coordination committee, National TB HIV technical working group meetings were conducted in 2014-15 & 2015-16.



Review meeting of JD BSD SACS conducted at NACO

Capacity Building Workshop on TB/HIV

NACO Basic Services Division (HIV/TB), Central TB Division, Ministry of Health & Family Welfare and National TB Institute, Bengaluru jointly conducted capacity building workshop on TB-HIV collaborative activities at National Tuberculosis Institute, Bengaluru during 23rd – 24th November 2015. State TB-HIV co-ordinators and RNTCP consultants from States & UT's participated in workshop. Director NTI Bengaluru, WHO NPO (DRTB), Programme Officer (HIV/TB), NC (HIV/TB) facilitated the workshop. The objectives of the workshop were as follows:

- Familiarize trainees on new TB/HIV framework and guidelines.
- Capacity building of consultants and TB-

HIV coordinator on analysis of routine data (including NIKSHAY, SACS data).

- To demonstrate importance of comprehensive approach (3 I sites analysis).
- Prepare trainees on rolling out daily regimen including RNTCP recording and reporting.



Workshop of Programme Officers (HIV/TB), NC (HIV/TB) & other participants from States/UTs

National Consultation on HIV Testing Service (HTS) approaches in India

Basic Services Division, NACO in collaboration with WHO India, organized a National Consultation on “HIV Testing Service (HTS) approaches in India” on 26th & 27th, November 2015, at New Delhi. The main aim of the national consultation was to identify the feasibility of adopting the various HTS strategies proposed by WHO in their consolidated guidelines to accelerate coverage to achieve the first 90 of 90-90-90 global HIV target. Members of SACS, NACO, Community representatives and Developmental partners attended the National Consultation. This consultation was chaired by Dr. Soumya Swaminathan, Secretary, DHR & DG, ICMR and AS & DG, NACO chaired the concluding session involving group work presentations.

The objectives of the consultations are:

- Discuss the progress and challenges of HIV testing services in India;
- Share the experiences of implementing the

Community Based HIV testing services in India;

- Discuss the modalities of adopting the new WHO guidelines related to: consent, demystifying counseling and disclosure, partner tracing and index testing including couple counseling, TI- Outreach and lay worker screening including self-testing and role of community based organization and DAPCU and
- State key recommendations to be implemented in India for accelerating HIV testing services to achieve first 90.

NACO is keen to expedite the acceleration of the HIV testing services to achieve the first 90. It is planning for a scale up HIV testing services for high-risk and vulnerable populations and more specifically to reach the unreached. It plans to adopt the new World Health Organization (WHO) consolidated guidelines that are relevant to the India's epidemic and context. The new WHO consolidated guidelines aims to address issues and elements for effective delivery of HTS that are common in a variety of settings, contexts and diverse populations. In addition, the WHO consolidated guidelines provides a new recommendation to support HTS by trained lay providers, considers the potential of HIV self-testing to increase access to and coverage of HIV testing and outlines focused and strategic approaches to HTS that are needed to support the new 90 –90 –90 global HIV targets – the first target being diagnosis of 90% of people with HIV. Moreover, this guidance will assist national programme managers and service providers, including those from community-based programmes, in planning for and implementing HTS.

Supply Chain Management: A strong monitoring mechanism for inventory management is in place. The inventory status for all commodities at the

state, district and facility level is monitored on a weekly basis at the National level.

Other New Initiatives under Basic Services

- 'Innovative Intensified TB case finding and appropriate treatment at high burden ART centres in India' project to support the three I's for HIV/TB (Intensified case finding, Isoniazid Preventive Therapy (IPT) and Infection Control) to reduce the burden of TB among people living with HIV was launched on World TB day 2015.
- National AIDS Control Organisation - Central TB Division with support from WHO has initiated a project which diagnoses TB and Rifampicin resistance among People living with HIV in 90 minutes time using Cartridge Based Nucleic Acid Amplification Test (CBNAAT). CBNAAT is used as primary diagnostic tool established in Designated Microscopic Centres located near to selected 30 ART centres in five states (Andhra Pradesh, Telangana, Karnataka, Maharashtra & Tamil Nadu). Patient diagnosed with Tuberculosis are linked to first line anti TB drugs daily regimen for TB patients diagnosed in these centers. Project components also include airborne infection control at HIV care settings and Isoniazid Preventive Therapy. Salient features of the project include:
 - o Single window service delivery for TB & HIV;
 - o Intensified case finding using CBNAAT;
 - o TB & HIV patients receive daily anti-TB therapy drugs in Fixed Dose Combination;
 - o Innovative drug intake tracking mechanism using missed call at a toll free number on the strip is used under this project;

- o Better management of side effects- Pharmacovigilance;
- o Isoniazid Preventive Therapy;
- o Air borne infection control at HIV care settings;
- o Digital training mechanisms including National Distance Learning Services (NDLS) webinar session for ART MOs for Infection Control training and video dialogues with DAPCUs were conducted for strengthening HIV TB activities at State and district level;
- o 76 CBNAAT sites have been linked for early diagnosis of TB among PLHIVs. New rapid diagnosis are yielding 12% TB cases and 8 % Rif Resistant TB cases and
- o Daily regimen for HIV/TB co-infected patients through single window services at ART centres has been started at 3 IS project sites. 99 DOTS has improved adherence due to innovative missed call system in the Fixed Drug Combination (FDCs).
- NACO in collaboration with Tata Institute of Social Sciences (TISS) has developed an integrated induction and refresher training module for all the counsellors working in ICTC, ART & STI facilities. This induction training of the counsellors has been commenced for all the States/UTs.
- India's case study for HIV/TB collaborative activities has been published by WHO Geneva as knowledge sharing document for resources limited countries.

24.9 CARE, SUPPORT AND TREATMENT

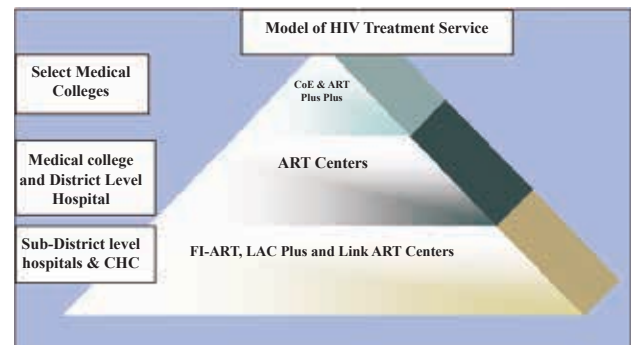
The Care, Support and Treatment (CST) component of the NACP aims to provide comprehensive

management to PLHIV with respect to free Anti-Retroviral Therapy (ART), psychosocial support to PLHIV, prevention and treatment of Opportunistic Infections (OI) including TB and facilitating home-based care and impact mitigation in stigma free environment. The overall goal is to improve the survival and quality of life of PLHIV.

A. Service Delivery Mechanism for Care, Support & Treatment

Care, Support and Treatment (CST) services are provided through a spectrum of service delivery models including ART Centers, Centers of Excellence (CoE), Pediatric Centers of Excellence (PCoE), Facility Integrated ART Centers (FI-ART), Link ART Centers (LAC), Link ART Plus Center (LAC Plus) and Care & Support Centers (CSC) established by NACO in health facilities across the country with aim to provide universal access to free and comprehensive CST Services. There are active linkages and referral mechanism for monitoring, mentoring, decentralization and specialized care. CST Services are also linked to ICTCs, STI clinics, PPTCT services and other clinical departments in the institutions of their location as well as with the RNTCP programme in order to ensure proper and comprehensive care and management. Fig. No. 9.1 gives a graphic view of this service delivery model.

Fig. 9.1: Model of HIV Treatment Service



A.1 Anti-retroviral Therapy Centers: Provision of free Anti-Retroviral Therapy (ART) for eligible

persons living with HIV/AIDS was launched on 1 April, 2004 in eight Government hospitals located in six high prevalence states. Since then, the programme has been scaled up significantly both in terms of facilities for treatment and number of beneficiaries. The ART centers are established in the medicine department of Medical colleges and District Hospitals mostly in the Government sector. However, some ART centers are functioning in the sub-district and area hospitals also, mainly in high prevalence states. The ART centers are set up based on prevalence of HIV in the district/region, volume of PLHIV detected and capacity of the institution to deliver ART related services. Till September 2015, there are 519 functional ART centers across the country.

A.2 Link ART Centers (LAC): In order to facilitate the delivery of ART services nearer to the beneficiaries, LACs are set up and located mainly at ICTC in the district/sub-district level hospitals nearer to the patients' residence. They are linked to a Nodal ART center within accessible distance. The LAC helps in reducing cost of travel; time spent at the center and hence helps in improving clients adherence to treatment. Presently, there are 1073 Link ART Centers functional.

A.3 Link ART Plus Centers: It was observed that nearly 25-30% of persons detected HIV positive at ICTC are not linked to care, support & treatment services. Reasons for this included, among others, persons being asymptomatic at the time of detection and long distances to reach the ART center for registration and basic investigations, which may lead them to postpone/delay their visit to ART centers till they become symptomatic. It was also observed that nearly 20% patients reach ART centers at a very late stage (CD4 count <50), when the risk of mortality is nearly 2-3 times higher.

In view of the above facts, the scope and functions of select Link ART centers were expanded to include Pre-ART registration and HIV care at

LAC itself. The LACs which perform Pre-ART management also are designated as "LAC plus". This helps to bridge the linkage loss between ICTC and CST services and also to reduce the travel cost and travel time of PLHIV in accessing ART services. PLHIV registered in LAC plus are followed up at LAC plus till they become eligible for ART or till referred to ART center for any other clinical references.

A.4 Centers of Excellence (CoE): CoE are established to facilitate provision of tertiary level specialized care and treatment, second line and alternative first line ART, training & mentoring and operational research. Ten Centers of Excellence have been established in different parts of the country. They are located in Bowring & Lady Curzon Hospital, Bangalore; BJ Medical College, Ahmedabad; Gandhi Hospital, Secunderabad; Post Graduate Institute of Medical Education and Research, Chandigarh; School of Tropical Medicine, Kolkata; Institute of Medical Sciences, BHU, Varanasi; Maulana Azad Medical College, New Delhi; Sir J. J. Hospital, Mumbai, Regional Institute of Medical Sciences, Imphal and Government Hospital of Thoracic Medicine, Tambaram.

A.5 Paediatric Centers of Excellence: The Regional Paediatric ART Centers established under NACP III have been upgraded now as Paediatric Centers of Excellence for paediatric care including management of complicated opportunistic infections, training and research activities. These centers have varying roles and responsibilities for delivery of care and support to infected children including specialized laboratory services, early diagnosis of HIV among infants, ART to children infected with HIV, counseling on adherence and nutrition etc. These centers also provide technical support to the other ART centers in paediatric care. Currently, seven Paediatric Centers of Excellence are functional in the country. They are located at Niloufer Hospital, Hyderabad; Indira Gandhi

Institute of Child Health, Bengaluru; LTMG Sion Hospital, Mumbai; JN Hospital, Imphal; Institute of Child Health, Chennai; Govt. Medical College Hospital, Kolkata and Kalawati Saran Children's Hospital, New Delhi.

A.6 ART Plus Centres: The ART centres providing second line treatment are known as ART Plus centres. They were established to provide easy access to second line ART. NACO is currently expanding the number of centres that provide second line ART by upgrading ART centers. Currently, there are 52 ART plus centers functioning in the country. It is ensured that every state has at least one ART Plus centre providing second line treatment.

A.7 Care & Support Centers: The overall goal of care and support centers is to improve survival and quality of life of PLHIV. Care and support centers provide expanded and holistic care & support services for People Living with HIV (PLHIV). It provides linkages and access to essential services, supports treatment adherence, reduces stigma and discrimination and improves the quality of life of PLHIV across India. The project is implemented by 17 state level and regional SRs. 11 out of 17 SRs are networks of PLHIV and at the facility level more than 60% of CSCs are implemented by PLHIV networks making it the biggest community led care and support intervention. Till September 2015, 350 care and support centers are functional and a total of 8,31,821 PLHIV have received care and support services.

A.8 Facility Integrated ART Centers: From April 2014, the concept of Facility Integrated ART Center (FIARTC) has been initiated with financial and technical support from NACO and SACS. The concept of FIARTC is much similar to ART center except for the patient load (>than 300 positives detected at ICTC) and the number of staff serving at the center. The main objective of initiating this concept was to serve those

geographical areas which have less accessibility, especially the hilly terrains, desert areas, tribal areas and other areas with fewer infrastructures to access the treatment. This initiative which is to be located at Medical college and District Level Hospital will help to reduce the number of LFU in most difficult areas and will help to increase the drug adherence among those who are on ART. As of September 2015 a total of 31 FIARTC centres have been made functional.

The progress achieved in expanding Care, Support and Treatment services till Sep 2015 is summarized in **Table 9-A**.

Table 9-A: Scale up of infrastructure under Care, Support & Treatment Services

Facility for CST	Baseline (Dec 2012)	As on March 2015	As on Sept. 2015
ART Centers	355	475	519
Link ART Centers	685	1068	1073
Centers of Excellence	10	10	10
Pediatric Centers of Excellence	7	7	7
ART Plus Centers	24	37	52
Care & Support Centers	253 (CCC)	325	350

** Early in 2012, the Care & support centers were referred as Community Care Center.*

B. Care, Support and Treatment Service Package

B.1 Free Universal Access to ART

Government of India had rolled out free ART initiative under NACP II in 2004. The National AIDS Control Programme (NACP) is now providing free ART to 9 lakhs PLHIV through 519 ART centers and 1073 Link ART centers. The different ART services provided by the programme are as below:

First line ART: First line ART is provided free of

cost to all eligible PLHIV through ART centers. Positive cases referred by ICTCs are registered in ART center for pre-ART and ART services. The assessment for eligibility for ART is done through clinical examination and CD4 count. Patients are also provided counseling on adherence, nutrition, positive prevention and positive living. Follow up of patients on ART is done by assessing drug adherence, regularity of visits, periodic examination and CD4 count (every 6 months). Treatment for opportunistic infections is also provided through ART centers. Till September 2015, 9.02 lakhs PLHIVs are on ART.

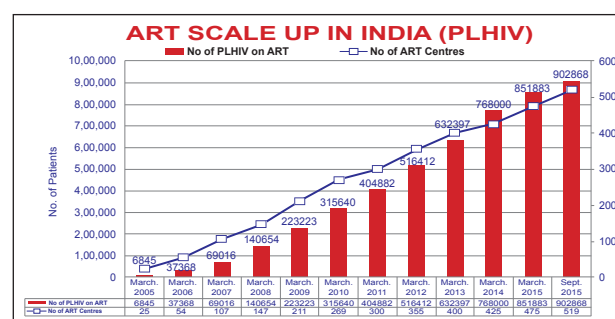
Alternative first line ART: A small number of patients initiated on first line ART experience acute/chronic toxicity/intolerance to first line ARV drugs necessitating change of ARV drugs to alternative first line drugs. Presently, the provision of alternative first line ART is done through the Centers of Excellence and ART plus Centers across the country.

Second line ART: The patients started on ART can continue on first line ART for a number of years if their adherence is good. However, over the years some percentage of PLHIV on first line ART develop resistance to these drugs due to mutations in virus. The rollout of second line ART began in January 2008 at 2 sites – GHTM, Tambaram, Chennai and JJ Hospital, Mumbai on a pilot basis and was then further expanded to other COEs in January 2009. Further decentralization of second Line ART was done through capacitating and upgrading some well-functioning ART Center as ‘ART plus Centers’. Till August 2015, 12823 PLHIV are receiving second line drugs at CoEs and ART Plus Centers. All ART centers are linked to CoE/ART plus centers. For the evaluation of patients for initiation on second line and alternate first line ART, State AIDS Clinical Expert panel (SACEP) has been constituted by NACO at all CoEs and ART Plus Centers. This panel meets

once in a week for taking decision on patients referred to them with treatment failure/major side effects.

Figure 9.2 shows the scaling up of service provisioning under CST component since March 2005. All measures of service provisioning, viz. number of ART centers, PLHIV ever registered and PLHIV on 1st line treatment have increased exponentially.

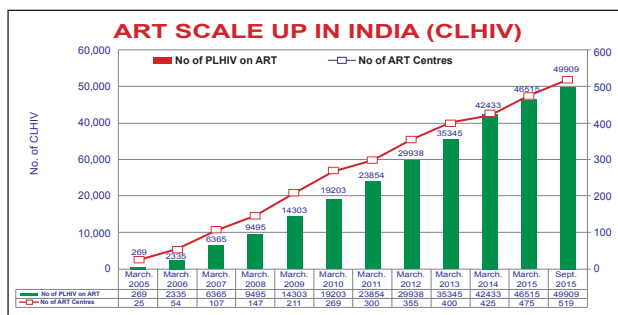
Fig.9.2: ART Scale up for PLHIV in India, 2005 – 2015 (till September, 2015)



National Paediatric HIV/AIDS Initiative: The National Paediatric HIV/AIDS Initiative was launched on 30th Nov 2006. Till September 2015, nearly 77,729 Children Living with HIV/AIDS (CLHIV) are active in HIV care at ART centers and of whom, 49,909 are receiving free ART. Paediatric formulations of ARV drugs are available at all ART centers.

Pediatric Second line ART: While the first line therapy is efficacious, certain proportion of children do show evidence of failure. There is not much data available on the failure rate on the Nevirapine based ART in children. However, WHO estimates that the average switch rate from first to second line ART is 2 - 3% per year for adults. It is likely that similar rates are applicable for children as well. Currently, provision of second line ART for children has been made available at all CoEs and ART plus Centers. Fig. No. 9.3 gives a view of the services provided to children living with HIV/AIDS, during 2005 – September 2015.

Fig.9.3: ART Scale up for Children Living with HIV/AIDS in India, 2005 – 2015



An overview of patients receiving services at different service delivery points under CST component is given in following Table.

Beneficiaries of Care, Support & Treatment Services

Services/Beneficiaries	Achievement as on September 2015
Adults in active care at ART Centres	10,80,058
Adults alive and on ART	8,52,959
Children in active care at ART Centres	7,7,729
Children alive and on ART	49,909
Persons alive and on 2nd line ART	12823*

*till August 2015

Fig. 9.4: Outcome of PLHIV ever initiated on ART till September 2015 (cross sectional data at one point of time)

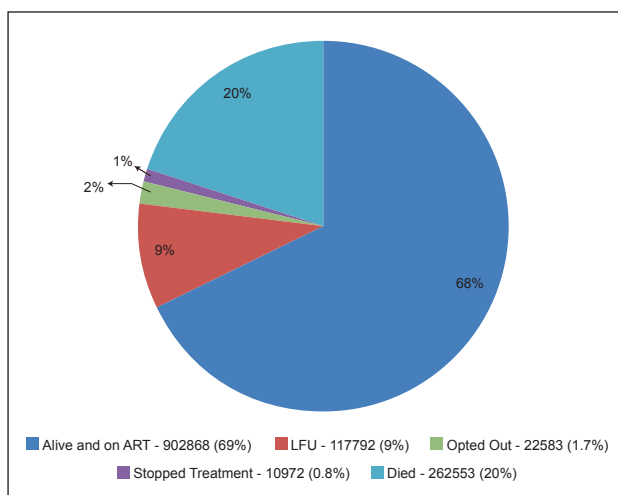
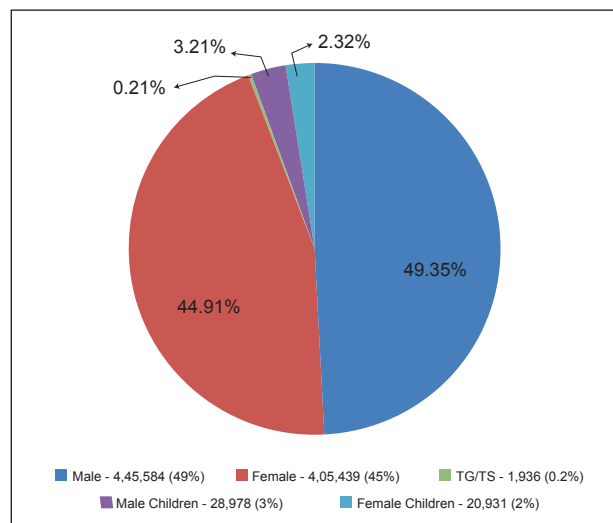


Fig. 9.5: Gender distribution of Alive on ART PLHIV and CLHIV till September 2015.



B.2 CD4 Testing Services: The programme provides facility for baseline and follow up CD4 cell count testing free of cost to all PLHIV attending ART Centres. There are 276 CD4 machines installed at present serving 519 ART centers. All machines procured by NACO are under comprehensive maintenance or warranty.

B.3 Early Infant Diagnosis (EID): In order to promote confirmatory diagnosis for HIV exposed children, a programme on EID was launched by NACO. All children with HIV infection confirmed through EID are linked to ART services.

B.4 Counselling Services: Counselling services are essential part of the services provided by the CST programme. Counselling services are provided by both ART Centres and Care and Support Centres. Counselling services are provided as part of the psychosocial care at ART centres and care & support centres. The counselling services are provided to both “Pre-ART” and “On-ART” clients on regular follow up visits and CD 4 testing. The themes of counselling includes adherence to ART drugs, issues related to toxicity, positive prevention, positive living, nutritional care, sexual and reproductive health and HIV disclosure among others.

B 5. Management of Opportunistic Infections:

ART centres provide clinical care to both Pre-ART and On-ART clients. The clinical care includes diagnosis, management as well as primary and secondary prophylaxis of opportunistic infections as per the guidelines. From April 2015 to September 2015, total 2,44,000 opportunistic infection have been treated at ART Centres.

B.6 Care and Support Services provided through Care and Support Centres (CSCs): The CSCs serve as a comprehensive unit for treatment

support for retention, adherence, positive living, referral, linkages to need based services and strengthening enabling environment for PLHIV. This is part of the national response to meet the needs of PLHIV, especially those from the high risk groups and women and children infected and affected by HIV. CSCs are run by civil society partners including District Level Networks (DLN) and non-government organizations (NGOs). The important services provided by CSCs are given below in the **table 9-B and 9-C**.

Table 9-B: Services provided by Care and Support Centers

Services	Activities
Counselling Services	<ul style="list-style-type: none"> ● One-to-one counselling ● Group/couple/family counselling ● Specialised counselling for children and pregnant women ● Counselling for HRGs ● Outdoor counselling (through outreach)
Outreach Services	<ul style="list-style-type: none"> ● Follow up of PLHIV for ART adherence ● Follow up of PLHIV for retention in care: <ul style="list-style-type: none"> ○ Pre-ART LFU ○ Tested positive but CD4 not done ○ Pre-ART clients who are eligible but not started ART ○ On ART MIS cases ○ On ART LFU cases ● Follow up repeat CD4 tests ● Reinforcement of key counselling messages as per client's need ● Disseminate information on signs and symptoms of OIs
Training on home based care services	<ul style="list-style-type: none"> ● Educating care giver (family member) on how to take care of minor ailments at home, on health and hygiene maintenance to delay opportunistic infections, on how to identify signs of symptoms of OIs that need medical treatment etc. ● Counselling family members on preventive measures, how to cope with emotions while dealing with family member/s who are living with HIV
Referral and linkage services	<ul style="list-style-type: none"> ● Referral for treatment and health needs ● Linkages and referrals for social welfare schemes and entitlements ● Linkages and referrals for non-health needs ● Accompanied referral from and to ARTC and other facilities ● Coordination with referral centres
Life skill education and vocational training	<ul style="list-style-type: none"> ● Counselling on livelihood options, with special emphasis on women and youths ● Training on life skills ● Vocational training through linkages with vocational training institutes in collaboration with departments such as Women and Child Development, Social Justice and Empowerment and other corporate sectors
Advocacy and communication	<ul style="list-style-type: none"> ● Regular sensitization meeting of all stakeholders ● Media advocacy ● Quarterly advocacy meetings ● Regular meeting of DRT
Support group meeting	<ul style="list-style-type: none"> ● Formation of support groups based on thematic areas ● Regular Conduction of SGM ● Documentation of SGM

Table 9-C: Cumulative Outcome of Services provided by care and support centers till September 2015

S No.	Indicator	Achievement
1	No. of PLHIVs registered in ART Centre and on ART are registered in the CSC	589,959
2	No. of PLHIV in Pre ART phase who get registered at the CSC	250,715
3	No. of registered PLHIVs receiving at least one counselling service in the quarter	596,885
4	No. of registered PLHIVs receiving at least one counselling session on thematic areas	558,487
5	No. of PLHIV whose at least one family member or sexual partner referred for HIV testing and received test result	38,947
6	No. of PLHIV registered in the CSC linked to Govt. social welfare scheme	269,271
7	Proportion of PLHIV Lost to Follow Up (LFU) brought back to treatment	121,178
8	No. of Advocacy meeting organised	2,327

C. CST Services Referral and Linkage Mechanism

Mechanisms for establishing linkages and referral systems are necessary to meet immediate and long term needs of the persons enrolled in a comprehensive care programme. PLHIV need a wide range of services during the course of HIV infection and stage of the disease. Therefore, the CST division have a comprehensive referral and linkage mechanism with different stakeholders.

D. Capacity Building for CST

To ensure uniform standards of services, adherence to operational guidelines and treatment protocols, induction/refresher training is provided to various personnel using standard curriculum, training modules and tools at identified institutions. Various training programmes organized under CST programme include:

- Orientation of faculty of Medical Colleges/ District Hospital (4 days);
- Training of Medical Officers (SMO/MO) of ART Centers (12 days);
- Training of Medical Officers of Link ART Centers (3 days);
- Training of ART Counselors (12 days);
- Training of Data Managers of ART Centers (3 days);
- Training of Laboratory Technicians for CD4 count (2 days);
- Training of Pharmacists (3 days) and
- Training of Nurses (6 days).

These trainings are conducted at the Centers of Excellence and other designated training centers across the country.

As part of continuous capacity building efforts, technical guidelines and training modules have been developed which are available for use at various facilities and SACS. These include:

- Guidelines for ART in adults and adolescents - March 2007 (Updated: April 2009, November 2011, July 2012 and May 2013);
- Guidelines for ART in children - November 2006 (Updated; September 2009 and October 2012);
- Guidelines for prevention and management of common opportunistic infections and malignancies among adults and adolescents - March 2007;
- Operational guidelines for ART centres, Link ART centre and LAC Plus;
- Operational guidelines for Care and Support centres;
- Technical guidelines on second line ART in adults and adolescents - November 2008 (Updated in December 2012; May-2013);

- Technical guidelines on second line ART for children - October 2009 (Updated; May 2013);
- Training modules for ART Medical Officers, ART specialists and LAC doctors May 2007 (Updated: December 2012);
- Guidelines for Providing Nutritional Care and Support for Adults living with HIV and AIDS: July 2012 and
- Nutrition Guidelines for HIV Exposed and Infected Children (0 – 14 years of age): July 2012.

The above documents are revised from time to time with the recommendations of the Technical Resource Groups. These can be accessed on the NACO website (www.naco.gov.in).

E. Endeavours to enhance and ensure the provision of high quality services

E.1 Technical Resource Groups on CST: Technical Resource Groups have been constituted on ART, Paediatric ART and Care & Support services. These groups consist of national and international experts and representatives of organizations like WHO, CDC, Clinton Health Access Initiative and Networks of Positive People. They review the progress and give valuable suggestions and recommendations on various technical and operational issues relating to the programme. Meetings of TRGs are held periodically with clearly drawn agenda and issues for discussion.

E.2 Supervisory/Monitoring Mechanism: Care, Support & Treatment Division at NACO is responsible for planning, financing, implementation, supply chain management, training, coordination, monitoring & evaluation of care support & treatment services in the country.

The implementation and monitoring at State level is the responsibility of the concerned State AIDS

Control Societies (SACS) consisting of Joint Director (CST), Deputy Director (CST), Assistant Director (CST) and Consultant (CST) based on volume of CST activities in the state.

For close monitoring, mentoring and supervision of ART Centers, various states have been grouped into regions and regional coordinators for CST have been appointed to supervise the programme in their regions. The regional coordinators and SACS officials visit each of the allotted ART Centers at least once in two months and they send regular reports to NACO. Periodic meetings of Regional Coordinators/CST officials of SACS are held at NACO to review various issues pointed out by them. In addition, NACO officers also visit the centers not performing satisfactorily or facing problems to guide them in implementation of the programme.

E.3 Regular CST review meetings: Review meetings of all the CST officers from the state and all NACO regional coordinators are held on a regular basis in a standard format. During these meetings, the state officers give an update on the various CST related activities in their state and wherever required remedial measures are taken.

E.4 Regular state level review meetings: Regular state level review meetings of the programme are conducted at SACS level. These meetings are attended by representatives of NACO, SACS, regional coordinators, medical officers and staff of ART centers and other facilities. Review of the performance of individual centers is undertaken during such meetings. Participants are given refresher/reorientation sessions also during such meetings.

E.5 State Grievance Redressal Committee (SGRC): At the state level, Grievance Redressal committee has been constituted to routinely review the functioning of the ART centers. The Committee is headed by the Health Secretary of the State and consists of Project Director of the

SACS, Director of Medical Education, Director of Health Services, and the Nodal Officers of the ART center, representative of Civil Society/positive network and NACO. This mechanism ensures that issues pertaining to grievances of PLHIV are brought to the notice of state authorities and SACS in a systematic manner for timely response.

E.6 MIS/LFU Tracking Mechanism: The information on patients Lost to Follow Up (LFU) is captured in the CMIS through the monthly reports from the ART centers. This information is monitored very closely and centers with high rates of LFU are visited by senior officers of NACO. Presently the cumulative LFU is about 6%. The responsibility of tracking and providing home-based counseling for LFU patients is shared with CSC through outreach workers, PLHA networks and counselors of ICTC in some places.

E.7 Follow up of Pre-ART LFU: All patients registered in Pre-ART and on ART undergo a CD4 test every six months. The ART center lab technician maintains a daily “due list” of the patients who are due for CD4 testing. This list is prepared from CD4 laboratory register. This list is available with SMO/MO and during patient’s visit in that particular month for ART, CD4 test is done. Those who do not undergo CD4 test within one week of their due date are followed up by phone call and also home visit by CSC staff if required to ensure that CD4 test is done on the next visit.

F. Other Initiatives in Care, Support and Treatment

F.1 Post Graduate Diploma in HIV Medicine: NACO, in collaboration with IGNOU, has rolled out a one-year PG Diploma programme in HIV Medicine. This programme is expected to bridge the gap in trained manpower for ART centers.

Programme Objectives:

- To imbibe comprehensive knowledge on basics of HIV as related to details of

management of HIV/AIDS in tertiary care set up;

- To manage all complications as well as opportunistic infections due to HIV/AIDS at the time of need and
- To recognize and handle emergencies related to HIV/AIDS and its complication and take bedside decision for management whenever required.

The programme is implemented through a network of programme study centers located in select Centers of Excellence.

F.2 Various capacity building activities done with support from I-TECH: I-TECH/CDC provide technical and financial support for these activities.

Expert Physician Access Number (EPAN): Expert Physician Access Number (EPAN) is a clinical consultation phone line (Warmline) for the ART medical officers and clinical staff to get timely access to clinical case consultation on unique and complicated HIV/AIDS cases.

Expert Physician Access Number (EPAN) was established in 2012 which was aimed to provide remote, mobile-based technical support to ART medical officers. Clinical Research Fellows (CRF) at CoEs were trained and oriented on the various aspects of the EPAN/Warmline service based on successful pilot of a similar service at Government Hospital of Thoracic Medicine, Tambaram, Chennai. The EPAN/Warmline operates between 9:00 AM and 5:00 PM on all days except Saturdays, Sundays, and public holidays. CRFs at CoEs are the custodians of the EPAN cell phone and address clinical/programmatic queries of ART medical officers. After responding and addressing the query, they use a standard case format to document the call.

National Distance Learning Seminar (NDLS): HIV/AIDS National Distance Learning Seminar

Series (NDLS) was introduced in September 2010. The series is aimed at training healthcare workers in ART centers, Link ART Centers and Care and Support Centres providing HIV/AIDS care, support and treatment. National and international HIV/AIDS experts present on a variety of topics on advanced care, comprehensive management, and treatment via synchronous live sessions, across several states and districts around the country using Adobe Connect software. These live sessions have features such as meeting room, live and real time chat, e-poll, video and audio conferencing making sessions intuitive by enabling two way communications.

These bi-monthly 60 minute sessions are conducted in English using an interactive case based format. Access to archived sessions via a streaming link is available to participants who are unable to attend the live, synchronous sessions.

Thus far, 108 NDLS sessions have been conducted with a total of 31,976 participants with an average of over 296 participants per session, with regular participation from ART centers, CoEs (Center of Excellences) and PCoEs (Pediatric Center of Excellences). Other than them 3 special DLS sessions were also conducted which had a total of 2,137 participants.

Regional Distance Learning Seminar (RDLS): Regional Distance Learning Seminar Series (RDLS) was launched in year 2012 aimed at training healthcare workers at ART Centers, Link ART Centers and Care and Support Centres on locally relevant topics, unique case studies and treatment guidelines often in local/regional languages. RDLS is conducted at the regional level and specifically addresses the issues pertaining to the respective state and/or region. The lectures are presented by regional experts on the topics chosen by the regional medical officers based on the current prevailing issues in the region/state.

Just like NDLS, RDLS uses Adobe Connect software to host the session with features like meeting room, live and real time chat, e-poll, video and audio conferencing making the session intuitive and interactive. So far, 162 RDLS sessions have been organized with over 13,765 participants trained.

Continued Medical Education (CME): With intention to provide Medical Officers working at ART centre with relevant, reliable and up to date information on current clinical management of HIV infected patients and to provide them with programmatic updates in management of PLHIV's, Continuing Medical Education (CME) programmes have been organized at regional level. So far 6 CME have been conducted and a total of 442 participants have attended them.

G. New Initiatives under Care Support and Treatment

CST division has under taken a number of new initiatives in 2015-16. They include focus on quality through implementation of Early Warning Indicators, Quality of Care Indicators and Retention Cascade to fill the gaps in the programme. Some of the most distinctive new initiatives of the division are as below:

G.1 Computerized Online Inventory Management System (IMS): In 2013, NACO conceptualized a technology based initiative for improved access to HIV commodities for patients across India. The IMS programme leverages bar-coding and web-based technologies to introduce an asset light, scalable solution for addressing the supply chain challenges faced by programme. Implementation of IMS was done in a phased manner and has been scaled up to all ART Centres in 2015-16.

G.2 Airborne Infection Control: The programme also initiated new TB/HIV activities in ART Centres including Airborne Infection Control Activities

and Intensified Case Finding (ICF), Isoniazid Preventive Therapy (IPT) & TB Infection Control (IC) (Three Is) for people living with HIV.

G.3 Completion of Assessment of ART Centres:

The assessment of ART Centres was also completed for 357 ART Centres and reports are sent to ART Centres and SACS for needful action.

G.4 Intensified LFU tracking to firm up the number of LFU patients before 2010:

NACO had also conducted an intensified tracking drive of Lost to Follow Up (LFU) clients before 2010 to firm up the number of LFU patients through Care and Support Centres.

G.5 HIV- Visceral Leishmaniasis (VL) co-infection programme coordination: HIV-Visceral Leishmaniasis (VL) co-infection programme coordination was initiated with National Vector Borne Disease Control Programme (NVBDCP) & World Health Organisation (WHO).

G.6 Successful Submission of a single proposal on HIV/TB to Global Fund:

For the first time NACO submitted a single proposal on HIV/TB to Global Fund under New Funding Model (NFM) and a grant of 238.53 USD Million was awarded for NACO activities.

24.10 LABORATORY SERVICES

“Laboratory services are not confined to HIV testing, but are overarching and have an impact on other interventions included under prevention, care, support and treatment, STI management, blood safety, procurement and supply chain management”

Laboratory Services Division functions at the cross cutting interface of all other divisions. It is recognized that work related to laboratory services are not just confined to HIV testing, but are overarching and have an impact on other interventions included those under prevention, care,

support and treatment, STI management, blood safety, procurement and supply chain management. Emphasis on quality assured laboratory service delivery is important to the success of the National AIDS Control Programme (NACP). Universal availability and routine access to quality assured HIV related laboratory services is ensured in all service delivery points through this division. In 2008, a Laboratory Services Division was formed at the center. In NACP IV Laboratory Services has been positioned as an independent division at the state level as well.

The assurance of quality in HIV testing services through implementation of External Quality Assessment Scheme (EQAS) for HIV and CD4 testing has been addressed in NACP with special focus. NACO launched “National External Quality Assessment Scheme” (NEQAS) in year 2000 to assure standard quality of the HIV tests being performed in the programme. The scheme aims to:

- Monitor laboratory performance and evaluate quality control measures;
- Establish intra laboratory comparability and ensure creditability of laboratory;
- Promote high standards of good laboratory practices;
- Encourage use of standard reagents/ methodology and trained personnel;
- Stimulate performance improvement;
- Influence reliability of future testing;
- Identify common errors;
- Facilitate information exchange;
- Support accreditation;
- Educate through exercises, reports and meetings and
- Assess the performance of various laboratories engaged in testing of HIV which will be used for finalizing the India specific protocols.

Technical Resource Group and Standardization of Services

To ensure the above, a Technical Resource Group (TRG) for Laboratory Services meets annually to discuss critical areas for quality and relevant laboratory issues like review and discuss strategy of testing and formulate/ revise guidelines. The seventh TRG meeting was held in December 2015.

Capacity Building

Laboratory Services division has conducted TO training workshops, addressed quality issues, details of Standard Operative Procedures (SOPs) and preparation of quality manual as a step towards accreditation of HIV testing Laboratories under NACO umbrella. As a result of the same, till date 11 NRLs and 49 SRLs have been accredited for HIV testing by the NABL. 3 SRLs are in the cycle of accreditation.

ICTC/CD4 Training

The division is involved on site supervision of trainings of laboratory technicians as per NACO norms and monitors modules for the same.

CD4 Testing

There are 254 functional CD4 machines installed at present serving 519 ART Centres. These include 159 FACS Count machines, 28 Calibur machines, 67 Partec machines. Additionally, 20 Point of Care CD4 machines were deployed in the National Programme. All machines procured by NACO are under warranty or maintenance. About 850493 CD4 tests were performed from April- September 30, 2015.

CD4 training institutions were identified in 2009 to systematize the training of laboratory technicians in ART centres. A Training of Trainers (TOT) was held in May and June 2009 for CD4 machine technicians and in-charges. A regional capacity building of four institutions for Calibur

machines (GHTM Tambaram, STM Kolkata, NARI Pune and PGI Chandigarh), five institutions for Count machines (GMC Vishakapatnam, NARI Pune, MAMC New Delhi, RIMS Imphal, CMC Vellore) and six institutions for Partec machines (Surat, Trichy, Kakinada, Davangere, Lucknow, Medinapur) have been done. Faculty of these institutions have been trained and is imparting further training. All technicians at ART centres are retrained at these institutions every year. Training plan has been developed in consultation with the respective manufacturer and NARI, Pune which provides technical expertise along with the resource persons for the same. Training of trainers was held for five days regionally and the regional training is ongoing for three days for FACS Calibur & Partec and two days for FACS Count. Approximately 145 ART laboratory technicians operating these machines have been trained from April to September 2015. Further trainings are planned such that every technician undergoes one training annually.

CD4 EQAS

NACO with support from Clinton Foundation initiated the development of National CD4 EQAS for Indian CD4 testing laboratories in 2005. National CD4 estimation guidelines were prepared in 2005. NARI functions as an apex laboratory for conducting the EQAS. QASI (an international programme for quality assessment and standardization for immunological measures) relevant to HIV/AIDS, is a performance assessment programme for T-lymphocyte subset enumeration. The technology transfer workshop was conducted for four regional centres at NARI in Sep 2009

External Quality Assessment Scheme (EQAS)

EQAS categorised the laboratories into four tiers, as follows:

- Apex laboratory (first tier) - National AIDS Research Institute, Pune

- Thirteen National Reference Laboratories (NRLs) located in all parts of India undertake EQAS in their respective geographical areas including apex (second tier)
- State level: 117 State Reference Laboratories (SRLs) (third tier)
- Districts level: all ICTC

Thus, a complete network of laboratories has been established throughout the country. Each NRL has attached SRLs for which it has the responsibility of supervision. Each SRL, in turn, has ICTC and blood banks which it monitors. One Technical Officer at each SRL is supported by funds from NACO to facilitate supervision, training and continual quality improvement in all SRLs and linked ICTCs

Fig. 10.1: % ICTC participated in Quarter I & Quarter II

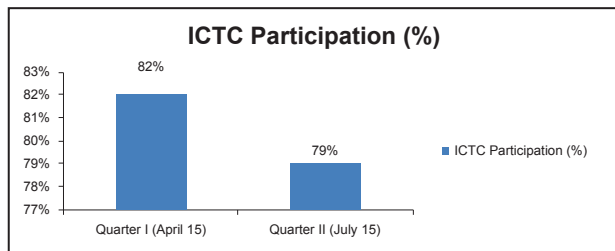
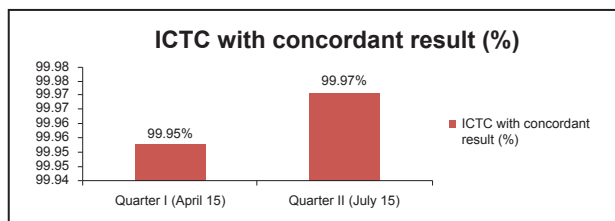


Fig. 10.2: % of ICTC with concordant results quarterly EQAS



Apart from the above NCDC Delhi; NICED Kolkata and NIMHANS Bengaluru, National Institute of Biologicals, Noida under supervision of NARI have been identified for panel preparation and evaluation of HIV, HCV and HBV kits procured by NACO. These laboratories form Consortium for Quality developed by NACO for kit evaluation.

Improvement in Quality Management Systems (QMS) and accreditation of HIV testing Laboratories

In an effort to strengthen quality of HIV testing continuous mentoring and supervision to implement and improve the QMS of HIV testing laboratories is undertaken. In 2007 and 2010 all NRLs and in 2009 and 2011-12 all SRLs have undergone two rounds each of third party assessment as per WHO checklist for 12 Quality system essentials. These assessments were facilitated by CDC-India. As a consequence of this, presently 11 NRLs and 49 SRLs have been accredited by National Accreditation Board for Testing and calibrating laboratories (NABL) as per ISO 15189: 2012 standards.

Viral Load Testing to Support Second Line ART

The Viral Load (VL) assays are provided for patients failing first line anti-retroviral therapy. NACO piloted VL testing at two centres for 10 months from January 2008. Currently there are ten viral load labs, supporting clinical decision making at 17 COEs (including 10 paediatric COEs) second line centres and 37 ART plus centres for patients estimated to transit to second line therapy.

National Programme on Early Infant/Child under 18 Months Diagnosis

Addressing HIV/AIDS in children especially infants below 18 months is a significant global challenge. HIV infected children are the most vulnerable and frequently present with clinical symptoms in the first year of life. Where diagnostics, care and treatment are not available, studies suggest that 35% of infected children die in the first year of life, 50% by the age of two and 60% by the age of three. A critical priority in caring for HIV infected infants is accurate and early diagnosis of HIV. With the tremendous expansion in HIV programme in PPTCT, ICTC, ART (for

adults and children) including access to Early Infant Diagnosis (EID) for HIV testing of infants less than 12 months old it is now possible to ensure that HIV-exposed and infected infants and children get the required essential package of care.

Objectives of providing care for HIV exposed infant and children are:

- To closely monitor HIV-exposed infants and children for symptoms of HIV infection;
- To prevent opportunistic infections;
- To identify HIV status early through early diagnosis of infant/child and final confirmation of HIV status at 18 months by HIV antibody test;
- To provide appropriate treatment including ART as early as possible and
- To reduce HIV related morbidity and mortality and improve survival.

These objectives are proposed to be achieved through following strategies:

- Integration of early infant diagnosis by HIV-1 PCR testing into Care, Support and Treatment Services;
- Availability and accessibility for the HIV testing by PCR test for the children below 18 months at all the ICTC centers (by Dried Blood Spot-DBS). Nationwide coverage will be done in phased manner;
- Infant HIV testing algorithm to be universally followed and implemented on every HIV exposed infant to ensure equal and routine access and
- Linkage of the exposed and infected infants to appropriate referral and care and treatment services to ensure timely intervention to reduce infant morbidity and mortality due to HIV infection.

NACO has trained staff at 1157 ICTCs for sample collection. These ICTCs are linked to six testing

labs (equipped with basic molecular testing facilities). Total 3243 tests were performed from April –September, 2015.

24.11 INFORMATION, EDUCATION & COMMUNICATION (IEC)

Communication is the key to generating awareness on prevention as well as motivating access to treatment, care and support. With the launch of NACP IV, the impetus is on standardising the lessons learned during the third phase. Communication in NACP IV is directed:

- To increase knowledge among general population (especially youth and women) on safe sexual behavior;
- To sustain behaviour change in at risk populations (high risk groups and bridge populations);
- To generate demand for care, support and treatment services and
- To strengthen the enabling environment by facilitating appropriate changes in societal norms that reinforces positive attitudes, beliefs and practices to reduce stigma and discrimination.

Key activities undertaken by IEC

Mass Media Campaigns: An annual media calendar was prepared to strategize, streamline and synergise mass media campaigns with other outreach activities and mid-media activities. NACO released campaigns on stigma and discrimination amongst healthcare providers and PPTCT on Doordarshan, cable and satellite channels, All India Radio and FM radio networks. To amplify the reach of mass-media campaigns innovative technologies were also utilised like dissemination of advertisements through movie theatres.

Long Format Programmes: The State IEC teams conducted various long format programmes like phone-ins and panel discussions on HIV related

issues through regional networks of All India Radio and Doordarshan. These programmes reached out to a large audience.

Outdoors: Outdoor activities like hoardings, bus panels, pole kiosks, information panels and panels in railways and Metro trains were implemented by the State AIDS Control Societies, condom social marketing organisations of NACO and under link worker's scheme to disseminate information on HIV prevention and related services. NACO has developed a well-coordinated plan involving different agencies to avoid duplication of activities.

Mid Media

Folk Media and IEC Vans: National AIDS Control Programme has extensively used the folk media as an innovative tool for developing an effective communication package to reach the unreached in the remote and media dark areas. The folk campaign is being implemented in two phases focusing on women and youth covering 35 States and UTs and covering almost 631 districts. Around 20,945 performances rolled out in phase-1, FY 2015-16. The primary messages used by the folk troupes during the campaign were on HIV prevention, care, support and treatment. Messages also highlighted the targeted audiences on youth vulnerability, the HIV testing, PPTCT, stigma & discrimination. The immediate impact was a spurt in queries especially from women for further information on HIV/AIDS and STI on testing facilities and increased access to ICTCs.



Folk dance performance in Meghalaya

Youth

Adolescence Education Programme (AEP):

The AEP is implemented in secondary and senior secondary schools to build-up life skills of adolescents to cope with the physical and psychological changes associated with growing up. Under the programme, sixteen hour sessions are scheduled during the academic terms of classes VIII, IX and XI. SACS have further adapted the NCERT module for training of teachers and transaction of AEP in classroom. The programme is running in more than 56000 schools.

Red Ribbon Clubs (RRC): The purpose of Red Ribbon Club formation in colleges is to encourage peer-to-peer messaging on HIV prevention and to provide a safe space for young people to seek clarifications of their doubts and on myths surrounding HIV/AIDS. The RRCs also promote voluntary blood donation among youth. More than 16000 clubs are functional and are being supported for these activities.

Second National Youth Consultation Meet:

National Youth Consultation Meet was organised in New Delhi from 22nd to 24th July 2015 involving Assistant Directors, (Youth Affairs) of State AIDS Control Societies (SACS). The objective of the workshop was to build the capacity of the ADs (Youth) on various thematic areas as well as to review the progress made by states in the last financial year. The revised guidelines of Adolescence Education Programme as well as Red Ribbon Clubs were also disseminated during the meet.

The meeting also aimed to orient the participants with the programmatic changes (in approach and implementation) made in the last year and facilitate in building an understanding of the key issues which need incorporation while planning, implementing and designing their State level programmes for adolescents and youth.

Themes like Substance Abuse, Role of Education, Adolescent & Health, RSKS programme by NHM

were covered by experts from the Government as well as development partners. A detailed session was taken on Life skills Education by NCERT and “All In” Strategy by UNICEF.



Second National Youth Consultation Meeting, 2015

International Youth Day (IYD)

NACO organised a national event on the International Youth Day on 19th August, 2015 in Goa at the Dr. Shyama Prasad Mukherjee Stadium. The event was presided by Shri Laxmikant Parsekar Hon’ble Chief Minister of Goa where as Minister of State for Health & Family Welfare, Shri Shripad Naik was the Chief Guest of the event. In addition, Shri Francis D’Souza, Deputy Chief Minister of Goa and Shri Ramesh Talwalkar, Minister of Sports and Youth Affairs graced the event. More than 7000 students from different schools and colleges in which Adolescence Education Programme and Red Ribbon Clubs are being implemented in Goa participated in the event. An exhibition showcasing the work of Red Ribbon Clubs from states across India was also displayed. A mobile application called “HELP” - HIV education and link to prevention was also launched by Shri Shripad Naik, Minister of State for Health & Family Welfare. Technical sessions on “Social Protection – A step towards secured future” and “Drug Use: HIV and young people were also organised.



Observance of National Youth Day on 19th August, 2015 at Goa

24.12 MAINSTREAMING AND PARTNERSHIP

NACO is collaborating with various key Ministries/ Departments of Govt. of India with objective of multi-pronged, multi-sectoral response which will ensure better use of available resources for risk reduction and impact mitigation of HIV. During the current financial year of 2015-16, NACO has formalized partnership with two departments by signing Memorandum of Understanding (MoUs) with Department of Commerce and Department of Rural Development.

During the current financial year the emphasis was given on roll out of 14 MoUs signed between NACO and other key Ministries/ Department of Government of India. State AIDS Control Societies (SACS) have been implementing the roll out of MoUs with the technical assistance of Regional Programme Manager (RPMs) in the priority States/UTs. The progress on roll out of MoUs are summarised in **Table – 11**.

Table 11: Quantifying progress in roll out of MoUs

Particulars	Total Number
Trainings	
Number of People Trained (Govt. Departments, PSU/Private Sector, Civil Society)	33720
Number of Resource persons trained (TOT)	1101
Number of Institutions incorporated HIV Module in training	58
IEC	
Number of hoarding erected by Dept./PSUs	57
IEC material developed/displayed	33
No of IEC material developed electronically	4
Services	
Number of ICTC established	11
Number of FICTC established	25
Number of STI clinic established	6
Integration of TB detection or treatment in any facility	6

Particulars	Total Number
PSU/Private Sector	
Number of PSUs and Private Sector approached and meetings held	227
Social Protection	
Number of Directives issued by Govt. to include HIV (Inclusive)	0
Number of Directives issued by Govt. for specific schemes (Exclusive)	18
Directives from Other Departments	
Number of Directives issued by other Departments	102
Knowledge Product	
Directory of HIV Sensitive social protection	11
Any other knowledge product	0

New Initiatives under Mainstreaming

Workshop on “Mobilising Political Leadership for Sustainable HIV Response”: One day Workshop on “Mobilising Political Leadership for Sustainable HIV Response” was organized by NACO in collaboration with the Forum of Parliamentarians on AIDS, UNAIDS, PIPPSE and UNDP on 17th April 2015. Shri Oscar Fernandes (Member of Parliament and President of the Forum of Parliamentarians on HIV/AIDS in India), Shri K B Krishnamurthy (Member of Parliament), Dr. Naresh Goel (DDG, NACO), Dr. Navneet Singh Tewatia (FPA Coordinator) and Mr. Kasinath (Consultant) were the resource persons of the workshop. The programme was attended by Project Officers (Mainstreaming, NACO), Regional Programme Managers (Mainstreaming & Partnership, NACO) and PIPPSE Project team.



Workshop on “Mobilising Political Leadership for Sustainable HIV Response”

South Asian Cities Summit, 2015: NACO supported the organisation of Session on “Building inclusive cities and Mainstreaming PLHIV/MARPS/Differently Aabled” in the South Asian Cities Summit held at New Delhi on 22nd and 23rd May, 2015. Dr. Naresh Goel, Deputy Director General, NACO chaired the session on the discussions on indispensability of inclusiveness for sustaining the development of Cities.

BOWL OUT - HIV

NACO in collaboration with Kings Eleven Punjab, AHF India Cares and Karnataka Health Promotion Trust organized BOWL OUT HIV event to address stigma and discrimination issues related to HIV/AIDS on 15th May 2015 in the Punjab Cricket Association Stadium at Mohali, Punjab. The purpose of the event was to decrease stigma showcasing how the cricketers play with children affected by HIV.

Sensitization workshop of Public and Private Sector Industry

An advocacy cum sensitisation workshop was conducted for Public and Private sector undertakings on 11th June 2015 at Bhopal by Madhya Pradesh State AIDS Control Society. This workshop covered industrial units from Bhopal, Guna, Gwalior,



Advocacy & Sensitization workshop for Public & Private Industries

Mandeep, Baitool, Bhind and Muraina regions. The sessions covered the basics know how on HIV and AIDS, roles and responsibilities of organisations and the ways to collaborate with State AIDS Control Societies in implementing programmes to address HIV issues within their world of work and surrounding areas as well.

Training on guidelines of DAPCU Led Single Window Model on Social Protection

NACO in collaboration with UNDP undertook two regional workshops to train the officials of DACPUs/SACS on the revised guidelines of “DAPCU led single window model on social protection for PLHIV, MARPs and CABA” in the country. First workshop was organised in Dimapur on 29th September 2015 and the second one was organised on 3rd November, 2015. DAPCU officials and SACS officials of 6 states were trained on the guideline. Training of District AIDS Prevention Control Units (DAPCUs) officials on social protection is a key step towards facilitation of change in the lives of most disadvantaged communities and people infected and affected with HIV/AIDS.



Resource person and Participants in the workshop in Nagaland

Trainings and advocacy meeting were undertaken by SACS with various stakeholders which included government officials from various departments, frontline workers, uniform personnel, NGOs, PLHIV network etc. A total of 0.87 lakh persons were trained till October, 2015. Approx 7.2 lakh PLHIVs are benefitting with various scheme on social protection offered by various Ministries/ Department and State Governments.

World AIDS Day, 1st December, 2015

Every year 1st December is observed as World AIDS Day (WAD). The day is an opportunity

for people worldwide to unite in the fight against HIV, show their support for people living with HIV. On World AIDS Day, awareness activities are implemented at grass root levels by States involving communities, NGOs, Youth etc.

A national level event was organized on 1st Dec, 2015 at National Media Centre (NMC), New Delhi. The Hon'ble Union Minister of Health & Family Welfare, Shri J. P. Nadda was the Chief Guest of the event and Minister of State Sh. Shripad Naik was the Guest of Honour. Secretary (H&FW), WHO Country Representative, UNDP Country Director, Country Coordinator, UNAIDS India and AS & DG, NACO also graced the event.

The Health Minister also released the “India HIV Estimations 2015-Technical Report” and launched Distance Learning Programme on Opioid Substitution Therapy (OST), Integrated HIV TB e-learning module, PPTCT ART Linkage Software (PALS) and HIV Sensitive Social Protection Portal on this occasion.

Shri Nadda expressed happiness over integration of Prevention from Parent to Child Transmission (PPTCT) programme with the RCH programme. He said more than a crore women were provided with counseling and testing services and this programme is continuing to scale up to ensure zero transmission from mother to child and every child born in the country to be free of AIDS. The above steps are important milestones as we traverse the 90:90:90 strategy adopted by UNAIDS, the Health Minister said. Further, he said that in view of the growing need for treatment services, the Ministry has also decided that the cut-off level for initiation of Anti Retrieval Therapy (ART) has been raised from CD4 Count of 350 to 500. It has also been decided to offer 3rd line treatment to patients who need it. The Minister also informed that NACO had been asked to gear up for these initiatives.



World AIDS Day Function in New Delhi on 1st Dec, 2015

He also stated that addressing stigma and discrimination towards HIV is of paramount importance, to enable persons infected and affected with HIV to access health services and live a life of dignity. The Health Minister highlighted the need for equal participation, inclusion and collective efforts. He dispelled all takes of shortage of drugs and stated that all procurement issues are under control by NACO. He said that India has extended support to the African countries in their fight against HIV-AID which reflects India's global commitment.

Shri Shripad Yasso Naik, Minister of State (MoS), Ministry of Health and Family Welfare said that youth can play bigger role to change the mind set of people by creating more awareness and dispelling misconceptions surrounding the diseases. Shri Naik urged people to come together to end this epidemic by 2030.

Shri B P Sharma, Secretary (Health) highlighted the contribution of evidence-based planning, involvement of stakeholders and communities, judicious deployment of resources and focused interventions, in the success India has had to reduce HIV-AIDS infection. He stated that we need to be alert and continue with our effort.

24.13 PROCUREMENT

Procurements are done using the funds under The Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM), The World Bank and Domestic Funds, through Procurement Agent. All the main

items required for the programme, including test kits and other items such as ARV Drugs, STI Drug kits, blood bags etc. are centrally procured and supplied to State AIDS Control Societies (SACS).

To ensure transparency in the procurement of goods, Bid Documents, Minutes of pre-bid meeting and Bid Opening Minutes are uploaded on the websites of Procurement Agent and NACO (www.naco.gov.in).

Procurement at State level remained an area of importance for NACO. For smooth and efficient procurement at State level, hand-holding support to State AIDS Control Societies is being provided by the procurement division at NACO. Regional Procurement & Logistics Coordinators are functioning in different regions and are managing the supply chain management at regional levels.

With increasing number of facilities (ICTCs, ART Centres, Blood Banks, STI clinics) being catered in the National Programme, the issue of supply chain management has gained importance. Efforts made to streamline the supply chain management of various supplies to consuming units include providing training on supply chain management to the procurement Officials of SACS.

To strengthen the supply chain management, an online web based application i.e. Inventory Management System (IMS) is developed by NACO with the support of outsourced agency for better tracking, monitoring and controlling the movement of all the centrally procured items. IMS is designed to capture all inventory transactions at every level from supplier, SACS Warehouses, Point of Care/Facilities to end beneficiary (patients) and provide real time visibility of inventory to prevent stock-out situations and expiries of commodities as well as digitize inventory record keeping. The system is used by all suppliers and store officers at SACS and pharmacist at ART centres. After extensive testing and pilot run, the system has

been scaled up nationally to all SACS and is being implemented downstream to all the ART centres. Currently this application is used at all the ART centre and SACS for tracking the inventory of ARV Drugs and in future it will be implemented to all the point of care facilities (i.e. ICTC, Blood Banks, STI/RTI Clinics, Lab Services and OST Centres). Inventory Management System (IMS) is equipped with bar-coding function and web-based technologies to introduce an innovative solution for addressing the supply chain constraints faced by NACO. It will replace the manual system of accounting inventory and systematically capture and aggregate data to enable to view the various report related to patients, inventory & supplies.

24.14 ADMINISTRATION

Implementation of Right to Information Act, 2005

The Right to Information Act, 2005 enacted with a view to promote transparency and accountability in the functioning of the government by securing citizen's right to access information under the control of public authorities, has already come into force with effect from 12 October, 2005. Under the Act, 2 Central Public Information Officers and 9 Appellate Authorities have been appointed for different subjects, within NACO. During 2015, 235 applications and 39 appeals were received till now and replies action taken for dispose them off by NACO.

24.15 STRATEGIC INFORMATION MANAGEMENT UNIT

One of the key strategies of NACP-IV is Strategic Information Management. It is envisaged to have an overarching knowledge management strategy that encompasses the entire gamut of strategic information activities starting with data generation to dissemination and effective use. The strategy will ensure high quality of data generation systems through surveillance, programme monitoring

and research; strengthening systematic analysis, synthesis, development and dissemination of knowledge products in various forms; emphasis on knowledge translation as an important element of policy making and programme management at all levels and establishment of robust evaluation systems for outcome as well as impact evaluation of various interventions under the programme.

The Strategic Information Management Unit (SIMU) comprises four divisions: Monitoring & Evaluation Division, Research Division, Surveillance & Epidemiology Division and Data Analysis & Dissemination Unit. The division generates and manages crucial information on the entire spectrum of the HIV epidemic and its control including HIV vulnerabilities and risk behaviours, levels, trends and patterns of spread of HIV and factors contributing to it, disease progression, treatment requirements and regimens, planning and implementing interventions, monitoring service delivery and tracking beneficiaries, effectiveness and impact of interventions. Another key function of SIMU is to promote data use for policymaking, programme planning, implementation and review at national, state, district and reporting unit levels.

Programme Monitoring and Evaluation: Key activities undertaken by Monitoring and Evaluation (M&E) division include:

- Managing Strategic Information Management System (SIMS) application for monthly reporting from programme units, including system development and maintenance, finalizing reporting formats, ensuring modifications/improvements based on feedback, training programme personnel in its use, troubleshooting and mentoring;
- Monitoring programme performance across the country through SIMS and providing feedback to concerned programme divisions and State AIDS Control Societies;

- Monitoring & ensuring data quality, timeliness and completeness of reporting from programme units data management, analysis and publications maintenance of the NACO website;
- Processing data requests and data sharing;
- Capacity building in strategic information areas;
- Preparation of programme status notes and reports and
- Providing Data for National/ International documents.

SIMS is an integrated web-based reporting, data management & decision support system, with monthly reporting from over 28,000 Reporting Units (RUs) across the country, covering programme components. SIMS user manuals, data definitions and wall charts have been developed to standardize the roll out of SIMS. A “Team of 4 IT Experts” have been deployed at NACO with the funding support from UNAIDS. The takeover process of SIMS application from M/s Vayamtech Ltd has been completed with the support of these IT personnel. The entire SIMS application is being managed and handled by them under the supervision of M&E unit at NACO. These IT Experts are now working for Maintenance, Development, Modifications in the input formats, Resolution of bugs/errors reported and Servers of SIMS Application on continuous basis. The standard reports for vital components of NACO are prepared and uploaded on SIMS application which consists of State/Month wise analysis of Core & Optional Indicators to maximise the use of programme data on regular basis.

Website: NACO website (www.naco.gov.in) provides access to information relating to policy, strategy and operational guidelines under the programme and the status of the facilities and programme interventions. Job advertisements, tender documents, updated status notes and

proceedings of important events are regularly updated on the website.

Following new initiative has been taken under website maintenance:

- The official website of NACO is under development with new design which will be hosted on cloud servers;
- The official website of NACO is updated regularly;
- GIGW complains related points on the website have been resolved;
- Weekly drug-stocks related information is updated regularly;
- Contact details of all Project Director and NACO officials are available on the website;
- Tender, Procurement and Vacancy related documents are regularly updated on website;
- Link for registration for National Blood Transfusion Council (NBTC) is added on the website;
- Training manuals, publications & guidelines related to various component of programme are updated on website;
- Link for registration of Aadhaar Card for PLHIV is added on the website;
- “1131289 Pages” viewed during January, 2014 to October, 2015;
- List of Services facilities are updated on regular basis and
- The content of the website are reviewed on a monthly basis by the programme divisions.

National Integrated Biological & Behavioural Surveillance (IBBS) & HIV Sentinel Surveillance (HSS) 2014-15: National Integrated Biological & Behavioural Surveillance (IBBS) has been implemented in 31 States and UTs of the country with strategic focus to strengthen the HIV surveillance among High Risk Groups and

Bridge Population. The broad objective of the National IBBS is to generate evidence on risk behaviours among HRGs to support planning and prioritization of programme efforts at district, state and national levels.

The specific objectives of IBBS are as follow:

- To measure and estimate the change in HIV-related risk behaviours and HIV prevalence at district and state levels among key risk groups, between baseline and end-line for NACP-IV and
- To analyse and understand HIV related vulnerabilities and risk profiles among key risk groups in different regions, by linking behaviours with biological findings.

Implementation Status IBBS: Field Work for the national IBBS has been completed in all the regions for all study groups. National report on key findings of IBBS for HRGs has been published.

HIV Sentinel Surveillance (HSS) 2014-15: 14th Round of HIV Sentinel Surveillance at ANC sentinel sites was implemented from 01 Jan 2015 till 31 March 2015 except in Andhra Pradesh and Telangana where HSS was implemented during March-May 2015. It was implemented among Ante Natal Clients (ANC) in 35 States and Union Territories (UTs) of India at 572 districts. Technical brief summarizing the key findings on HIV prevalence level and trends among ANC clients has been published.

HIV/AIDS Research: Research is a vital component of strategic information management under the National AIDS Control Programme. HIV/AIDS research covers a wide diversity of areas, such as epidemiological, social, behavioural, clinical and operational research; each of these has a strong role to play in providing a direction to the programme strategies and policies. NACO focuses on ensuring translation of research outputs into programmatic action and policy formulation.

The main activities of the Research Division are:

- Setting Priority Areas for Evaluation & Operational Research in HIV/AIDS & development of research Protocols;
- Commissioning research studies under National HIV/AIDS Research Plan (NHRP);
- Coordinating, processing and approving research studies received from MD/M.Phil/Ph.D students;
- Coordinating activities of Technical Resource Group (TRG) on Research & Development and NACO-Ethics Committee;
- Dissemination of HIV/AIDS research outcomes and
- Coordination of activities of Network of Indian Institution for HIV/AIDS Research (NIIHAR).

A structured research plan has been developed for NACP-IV, which is termed as the National HIV/AIDS Research Plan (NHRP). It aims to overcome the barrier posed by gaps between the generation and use of research evidence to inform and influence policy makers to make evidence-based policy decisions. It is focused on time-bound studies with a multi-centric approach and evolving a strong mechanism to use the research outcomes for programmatic purposes.

Objectives of National HIV/AIDS Research Plan (NHRP):

- To identify the information gaps and research needs in the programme that require research to generate fresh evidence;
- To develop and finalise research priorities in consultation with programme divisions, partners and technical experts;

- To commission epidemiological, socio-behavioural, operational, clinical research and evaluations through identified institutes/organisations;
- To consolidate & disseminate research outcomes for programmatic use from time to time and
- To promote scientific publication in the form of papers/articles/reports/briefs etc.

Overall 90 research studies had been identified – Phase I (36), Phase II (34) and Phase III (20). Concept notes were developed for each topic in Phase I. TORs for institutes and draft MOU to involve the institutes had also been developed and vetted by legal representative. Procedure for selection of institutes or organisations as lead research institute & participatory research institutes had been developed in consultation with donor partners. Scoring criteria was developed to evaluate EOIs as well as detailed proposals. Periodic meetings have been held with donor partners to discuss various issues from time to time and finalise various modalities of funding and implementing NHRP.

A Research Plan Screening Committee (RPSC) had been constituted under the chairpersonship of Dr. Prema Ramachandran to evaluate Expressions of Interest, detailed proposals received through RFPs and to finalise the Principal Investigator and Co-PIs through the 2-stage selection process. RPSC met thrice since March 2014 and reviewed a total of 113 EOIs received through three different Calls for Proposals. All the Phase I studies have been approved by TRG and cleared by NACO Ethics Committee and are in the process of contracting and fund release.

Key activities undertaken during 2015-16:

1. The TRG-R&D met once in 2015. A total of 4 research proposals were reviewed in this meeting and
2. NACO-Ethics Committee met once in 2015 and recommended 8 research proposals.

National Data Analysis Plan: The Data Analysis and Dissemination Unit of the NACO has initiated the National Data Analysis Plan (NDAP) under NACP-IV, to address programme needs with respect to evidence and research and to make the best use of data available under the programme.

Objectives of National Data Analysis Plan (NDAP):

- To identify the topics/thematic areas that can be studied by analysing available information (programme data);
- To structure the analysis by identifying key questions and appropriate methodology/tools for analysis;
- To commission the analysis through a collaborative approach involving institutes, programme units & senior experts as mentors, with agreed timelines;
- To consolidate, discuss & disseminate the analytical outcomes for programmatic use from time to time and
- To promote scientific writing within the programme in the form of papers/articles/reports/briefs etc.

The National Data Analysis Plan (NDAP) is a first-of-its-kind activity for a public health programme, whereby data has been systematically analysed to address programmatic queries raised during the end phase of the National AIDS Control Programme Phase III (NACP-III). This project was initiated in 2013 with the approval of the Secretary, Department of AIDS Control (presently National AIDS Control Organisation) and progressed with the development of concept notes, orientation and mentoring of analysts, signing of a Memorandum

of Understanding (MoU) and confidentiality document, formation of the NDAP secretariat, reviewing and finalising of protocols and analysis plan, capacity building at each stage through mentorship and workshops, development of articles and their dissemination through scientific journals and finally, a dissemination workshop.

This was a retrospective analysis, with programme data including but not limited to Computerized Management Information System (CMIS), HIV Sentinel Surveillance (HSS), National Family Health Survey (NFHS), HIV Estimation, Integrated Biological and Behavioural Assessment (IBBA), Targeted Intervention data from Form C and Form E and the database on People Living with HIV/AIDS (PLHA). Predominantly, these data have been collected during the third phase of NACP, i.e. during 2006–2012. Most of the analysis is descriptive due to the cumulative nature of the data, except in the PLHA dataset, which used survival analysis. All data sets were approved by a data sharing committee of NACO and all studies were reviewed and approved by the NACO. All researchers in this initiative entered a data confidentiality agreement with NACO. This initiative was supported by the Centers for Diseases Control and Prevention (CDC), World Health Organization, India (WHO-India), FHI-360, Population Council and John Snow, Inc. (JSI).

This initiative has been able to engage with researchers across 28 institutions across all the regions of the country, ensuring the availability of research capacities for future region-specific activities. Strength of the project is that it was able to engage senior public health experts as “mentors”, who formed the source of critical thinking and helped maximise the benefits of the initiative. Their ongoing support to NACO, as well as to the individual researchers engaged in this initiative, was immeasurable. The topics of analysis of NDAP could be broadly categorised under the

following heads: (i) TI; (ii) Strategic Information Management Unit (SIMU); (iii) Basic Services Division (BSD), including Integrated Counselling and Testing Centre (ICTC) and Prevention of Parent/Mother to Child Transmission (PPTCT); (iv) Blood Safety; (v) Care, Support and Treatment (CST) and (vi) Laboratory support.

The whole project period may be divided into the preparatory phase, data standardisation and analysis plan development phase, conceptualisation, writing phase and dissemination phase. The preparatory phase included data extraction, concept note development, literature building, engagement of researchers and institutions. In the second phase, programme data was standardised to ensure quality and the analysis plan was finalised by conducting review meetings. The conceptualisation phase ensured critical thinking by researchers in order to answer some of the key questions of the programme with the available data and the writing phase entailed developing both a technical document with the programme implications as well as peer-reviewed articles. The dissemination phase ensured that the findings were shared broadly with those involved in the programme and scientific audiences, through dissemination workshops and submissions to journals for peer-reviewed publication.

During each phase, the NDAP secretariat consisting of officers from NACO ensured appropriate support for the researchers. In addition, capacity-building sessions were conducted at regular intervals to facilitate the project and also to ensure the availability of these capacities across all regions. The capacity-building sessions were oriented towards data management, conceptualisation with critical thinking, development of an analysis plan and scientific writing. The presence of mentors for the researchers throughout the project ensured scientific rigor and critical thinking.

The achievements of this exercise were threefold e.g. building the capacities of the researchers across the country; successful collaborative work at the national level and the dissemination of the findings, intended for both programme audiences and scientific audiences.

The dissemination of NDAP took place through a one-day dissemination workshop, which was attended by both programme implementers and researchers. Apart from dissemination workshop, the summary findings and peer-reviewed publications were achieved. 60% (21/32) of the topics included key findings along with the programmatic implications for NACO.



Dissemination workshop of National Data Analysis Plan in New Delhi

50% (16/32) have finalised peer-reviewed articles and submitted them to scientific journals, which are at different stages of publication. Details of these submissions are mentioned below:

- Published in the *World Journal of AIDS* (5)
- Accepted for publication supported through *WHO* (9) and *Journal of AIDS* (2)

NDAP's work has several lessons to offer, which could be adopted in future activities. Considering the potential of such programme data, periodical exercises of this nature are required at the state and regional levels. Hence it is suggested that the State AIDS Control Society (SACS) and ICMR take this forward. Instead of looking at this as a one-time activity, national programmes, including

NACO and SACS, should consider including these as "terms of reference" for the staff working on this programme.

ISO 9001 Certification of NACO

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The ISO 9000 family addresses various aspects of quality management and contains some of the ISO's best known standards. The standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements and that quality is consistently improved.

ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family that can be certified to. ISO 9001:2008 helps ensure that customers get consistent, good quality products and services.

After year-long efforts of Technical team of National AIDS Control Organisation (NACO), various processes of NACO have been ISO certified. Now the NACO is an ISO 9001:2008 certified organization. In fact NACO is the 1st division/organisation under Department of Health & Family Welfare, Ministry of Health & Family Welfare to get the ISO 9001:2008 certification.

ISO 9001 Road Map: This achievement comes after successful completion of two rounds of external audit conducted by STQC, Dept. of Electronics and IT, Govt. of India. Prior to that when NACO decided to go for ISO certification as part of fulfilment of Result Framework Document (RFD) requirements, a core group was formed in the Department. This core group periodically met to work on the activities of ISO certification in the department. A consultant was hired to support and guide the different divisions of NACO about the various requirements of ISO 9001:2008 certification. A Senior Deputy

Director General (DDG) was made Management Representative (MR) for this activity. The MR responsibility included, ensuring that processes needed for the quality management system are established, implemented and maintained, reporting to top management on the performance of the quality management system and any need for improvement, and ensuring the promotion of awareness of customer requirements throughout the organization.

HIV Estimations

National AIDS Control Organization (NACO), Ministry of Health and Family Welfare, Government of India periodically undertakes HIV estimation process to provide the updated information on the status of HIV epidemic in India. The first HIV estimation in India was done in 1998, while the last round was done in 2012. India HIV Estimates 2015, latest round in the series, provides the current status of the HIV epidemic in the country and the States/Union Territories (UTs) on key parameters of HIV prevalence, number of people living with HIV (PLHIV), new HIV infections, AIDS-related mortality and treatment needs.

The exercise was carried out by independent experts under the guidance of the National Institute of Medical Statistics (NIMS)/Indian Council of Medical Research (ICMR). The experts were drawn from NACO, AIIMS (New Delhi), NIHF (New Delhi), UNAIDS, WHO, CDC and other organizations. The results were finalised after a series of consultation meetings of the National Working Group (NWG) on surveillance and estimates over a period of around eight months. The results generated were approved after being critically reviewed by the National Technical Resource Group (TRG) on HIV Surveillance & Estimation comprising national and international experts. Technical report presenting the key highlights from the HIV estimations 2015 has been published and released by Hon'ble Union Minister

for Health and Family Welfare on World AIDS Day on 1st December in New Delhi.

Data Sharing Committee

NACO 'Data Sharing Guidelines' has been revised in July 2015 with the approval of competent authority. According to revised Data Sharing Guidelines, Data up to state level (including all facilities and district level under it) requires approval by SACS only; same has been informed to all SACS also.

Financial management

Financial management is an integral part and important component under NACP-IV (2012-17) programme architecture. Financial management deals with the approval and review of annual plans and budgets, fund flow mechanisms, delegation of financial powers, accounting and internal control systems and to ensure that the funds are effectively used for programme objectives. It brings together planning, budgeting, accounting, financial reporting, internal control including internal audit, external audit, procurement, disbursement of funds and physical performance of the programme with the objective of managing resources efficiently and effectively under the effective control of Director (Finance).

The financial process focuses on financial analysis for programmatic and management use and meeting reporting obligations for all stakeholders and producing accurate and timely information that forms basis for better decisions, reducing delays and bottlenecks. Fiduciary requirements are addressed by designing and implementing effective audit mechanisms at all levels. This provides reasonable assurance that:

- Operations are being conducted effectively and efficiently in accordance with NACP norms;

- Financial and operational reporting are reliable;
- Laws and regulations are being complied with and
- Assets and records are maintained.

During NACP IV, the following areas are being attended specially;

- Delegation of Financial Powers;
- Asset management;
- Audit structures;
- NGO financing and accounting;
- Advances;
- Inter-unit transfers;
- Computerized Project Finance Management System (CPFMS) and
- Human resources for Financial Management.

Key roles and responsibilities of Finance Division

- Tendering financial advice on all matters involving expenditure and forwarding proposals from programme divisions for concurrence of the Integrated Finance Division of Ministry of Health and Family Welfare;
- Monitoring and reviewing the progress of expenditure against sanctioned grant on a monthly and quarterly basis, ensuring compliance of instructions issued by the Department of Expenditure on economy/rationalization of expenditure;
- Standing Committee of Parliament on Finance/Public Accounts Committee and Audit Paras;
- Preparation of budget and related work in respect of Grant and

- Coordination and compilation of the detailed demand for Grants and the Outcome Budget of the Ministry of Finance.

Key Functions

Budgeting

- Preparation for Demand for Grants;
- Preparation of Budget Estimates/Revised Estimates in consultation with the Programme Divisions and
- Correspondence with Planning Commission for finalizing plan allocation.

Accounting functions

- Annual action plan preparations;
- Processing and conveying approval;
- Release to State Governments for onward transmissions to the corresponding SACS, NGOs, consultancy agencies, central institutions;
- Expenditure accounting of NACO and SACS;
- Monitoring of utilization certificates;
- Oversight of financial management and handholding SACS on expenditure management, target, advance settlements and
- Other recipients.

Audit Functions

- Coordination for statutory as well as internal audit of SACS;
- Submission of audit reports to ministry, donor agencies etc. and
- Facilitate audit at NACO Hq. level.

Internal financial advisory functions

- Preliminary checking of bills by DDO (NACO);
- Advice on financial matters and
- Representing negotiation meetings.

Donor Coordination's

- With extra budgetary donors like UNAIDS, BMGF, Clinton Foundation etc.;
- State Coordination Committees;
- Convening of review meetings;
- PDs review on SACS Financial Management;
- MIS reporting on financial matters;
- Functional support to CPFMS;
- Handholding of States;
- Periodic updates;
- Submission of claims for reimbursement and
- Preparation of financial management reports, interim unaudited financial report to the World Bank through Controller of Aid Accounts and Audit (CAAA)

Year wise expenditure during (2013-14, 2014-15 & 2015-16) under NACP-IV:

Year wise expenditure during NACP-IV is tabulated as under:

Table 15.1: R E & expenditure incurred during NACP-IV

(Rs. in crore)

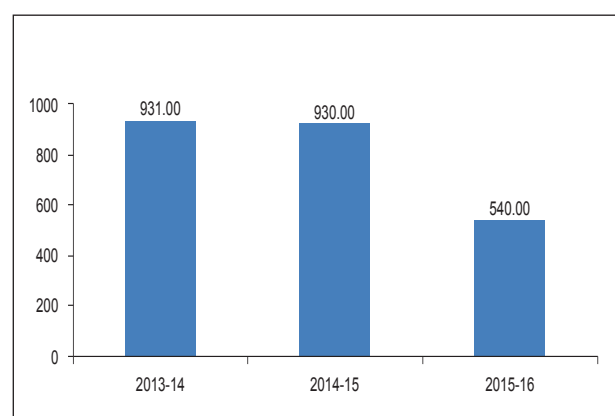
2013-14		2014-15		2015-16	
R E	Expenditure	R E	Expenditure	B E	Expenditure
1500.00	1473.16	1300.00	1287.39	1397.00	964.75*

* Expenditure up to 17/11/2015

Allocation through State Structure Annual Plan of NACP-IV

The AIDS Control programme is implemented through State AIDS Control Societies in all States and Union Territories. There had been significant increase in the State plans as many programme interventions were scaled-up and stabilized. In addition to providing financial resources, NACO facilitated commodity and equipment support to the HIV service delivery centres following a central procurement method. The scaling-up of resource allocation- is given in **Fig: 15.1**.

Fig 15.1: Resource allocation through State Structure from 2013-14 to 2015-16 (Rs. in crore)



Sources of Funding for NACP-IV (2012-2017)

NACP-IV approved on 03 October 2013, was formulated after a wide range of consultations with a large number of partners including Government Departments, Development Partners, Non-Governmental Organizations, Civil Societies, representatives of People Living with HIV/AIDS, positive networks and experts in various subjects. This consultation was carried out over a period of more than six months with 35 working groups, sub-groups and national as well as regional consultative meetings comprising of more than 1,000 participants. Sources of funding for NACP-IV is at **Table: 15.2**.

Table 15.2: Sources of Funding for NACP-IV
(Rs. in crore)

Gross Budgetary Support	
General Component (GC)	8,505.20
Externally Aided Component (EAC)	
(IDA/The World Bank Rs. 1,275 crore + The Global Fund Rs. 1,826.25 crore)	3,101.25
Sub-Total 1 (I + II)	11,606.45
Extra Budgetary Support	
(To be implemented directly by development partners)	1,808.60
Sub-Total 2 (III)	1,808.60
Grand Total	13,415.05

The budget estimates of NACP-IV have been worked out based on the targets projected for NACP -IV and using existing costing norms suitably adjusted for the next five years. The total approved budget for NACP-IV is Rs. 13,415 crore which comprises Government Budgetary Support, Externally Aided Budgetary Support from the World Bank and the Global Fund and Extra Budgetary Support from other Development Partners.

Initiatives to Strengthen the Financial Systems

Systems have been established to release the sanctioned amount in a phased manner and to closely monitor the cash flow to peripheral units so that the States, at no point, face a shortage of resources. Monitoring is done through the online systems by having a snapshot of resource positions at any given point of time.

National AIDS Control Programme emphasizes the need for strengthening the workforce in the accounts and finance units at the Central Level for close monitoring and at the State and District levels for prompt utilization of resources. From a skeleton staff structure at various levels, it has enlarged to a group of professionals, with a good mix of both regular and contractual staff.

Better Monitoring Systems

Computerized Project Financial Management System has been developed and rolled-out to have better financial management. The system is working in all SACS for tracking expenditure management, capturing financial data and utilizing and monitoring of advances. An e-transfer facility to avoid transit delays in transfer of funds to states has been implemented in the previous years. This has been established in all the States now and the steps are being taken for onward transfer of funds from state to districts and other implementing agencies at peripheral unit level. Payment of salary to staff at district and peripheral units have been made totally through e-transfer and this has brought down the accumulation of funds at implementing agencies, thereby minimizing 'advances'. Copies of sanction orders, guidelines and instructions have been put on the NACO website and are updated periodically to ensure wider dissemination of information.

The acronym is provided at Appendix - I.**Appendix - I****ACRONYMS**

AEP	:	Adolescence Education Programme
AIDS	:	Acquired Immuno-Deficiency Syndrome
ANC	:	Antenatal Clinic
ART	:	Antiretroviral Therapy
BCC	:	Behaviour Change Communication
BCSU	:	Blood Component Separation Unit
BMGF	:	Bill & Melinda Gates Foundation
BTS	:	Blood Transfusion Services
BSC	:	Blood Storage Centre
BSD	:	Basic Services Division
BSS	:	Behaviour Surveillance Survey
CBO	:	Community Based Organization
CCC	:	Community Care Centres
CD4	:	Cluster of Differentiation 4
CDC	:	Centre for Disease Control and Prevention
CI	:	Confidence Interval
CLHIV	:	Children Living with HIV
CMIS	:	Computerised Management Information System
CoE	:	Centre of Excellence
CPFMS	:	Computerised Project Financial Management System
CPGRAMS	:	Computerised Public Grievances Redress and Monitoring System
CSC	:	Care and Support Centres
CSMP	:	Condom Social Marketing Programme
CST	:	Care, Support and Treatment

CVM	:	Condom Vending Machine
DAPCU	:	District AIDS Prevention & Control Unit
DIC	:	Drop-in Centres
EID	:	Early Infant Diagnosis
EQAS	:	External Quality Assessment Scheme
FHI	:	Family Health International
FICTC	:	Facility Integrated Counseling & Testing Centre
FPA	:	Forum of Parliamentarians on HIV & AIDS
FSW	:	Female Sex Workers
GFATM	:	Global Fund for AIDS, Tuberculosis and Malaria
GIPA	:	Greater Involvement of People with HIV/AIDS
HIV	:	Human Immunodeficiency Virus
HRG	:	High Risk Groups
HSS	:	HIV Sentinel Surveillance
IBBS	:	Integrated Biological & Behavioural Surveillance
ICF	:	Intensified Case Finding (tuberculosis)
ICMR	:	Indian Council of Medical Research
ICTC	:	Integrated Counseling and Testing Centre
IDU	:	Injecting Drug User
IEC	:	Information, Education and Communication
JAT	:	Joint Appraisal Team
LAC	:	Link ART Centre
LFU	:	Lost to Follow-up
LS	:	Laboratory Services
LWS	:	Link Worker Scheme
M & E	:	Monitoring and Evaluation
MoU	:	Memorandum of Understanding

MSM	:	Men who have Sex with Men
NACO	:	National AIDS Control Organisation
NACP	:	National AIDS Control Programme
NARI	:	National AIDS Research Institute
NBTC	:	National Blood Transfusion Council
NGO	:	Non-Government Organisation
NIMS	:	National Institute of Medical Statistics
NRHM	:	National Rural Health Mission
NRL	:	National Reference Laboratory
NTSU	:	National Technical Support Unit
OI	:	Opportunistic Infections
OST	:	Opioid Substitution Therapy
PEP	:	Post-Exposure Prophylaxis
PLHIV	:	People Living with HIV
PPP	:	Public Private Partnership
PPTCT	:	Prevention of Parent to Child Transmission
QMS	:	Quality Management Systems
RI	:	Regional Institute
RNTCP	:	Revised National Tuberculosis Control Programme
RRC	:	Red Ribbon Club
RRE	:	Red Ribbon Express
RTI	:	Reproductive Tract Infections
SACS	:	State AIDS Control Society
SIMS	:	Strategic Information Management System
SIMU	:	Strategic Information Management Unit
SMO	:	Social Marketing Organisation
SRL	:	State Reference Laboratory

STI	:	Sexually Transmitted Infection
STRC	:	State Training & Resource Centre
TAC	:	Technical Advisory Committee
TB	:	Tuberculosis
TG	:	Transgender
TI	:	Targeted Interventions
TRG	:	Technical Resource Group
TSG	:	Technical Support Group
TSU	:	Technical Support Unit
UNDP	:	United Nations Development Programme
UNICEF	:	United Nations Children's Fund
USAID	:	United States Agency for International Development
UT	:	Union Territory
VBD	:	Voluntary Blood Donation

