EVALUATION OF

Phase IV & EXTENSION PERIOD

Submitted to

National AIDS Control Organisation
India's Voice against AIDS
Ministry of Health & Family Welfare, Government of India

Submitted by

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Abbreviations

AAP	:	*Annual Action Plan*
AD	:	*Assistant Director*
ADG	:	*Additional Director General*
AE	:	*Actual expenditure*
AIDS	:	*Acquired Immune Deficiency Syndrome*
ART	:	*Anti-Retroviral Treatment*
BTS	:	*Blood Transfusion Services*
CBO	:	*Community-based organizations*
CoE	:	*Centre of Excellence*
CST	:	*Care, support and treatment*
DADU	:	*Data analysis and dissemination unit*
DAPCU	:	*District AIDS prevention and control unit*
DD	:	*Deputy Director*
DDG	:	*Deputy Director-General*
DG	:	*Director-General*
DSACS	:	*Delhi State Aids Control Society*
DSRCs	:	*Designated STI/RTI Clinics*
EID	:	*Early Infant Diagnosis*
FIDU	:	*Female Injecting Drug Users*
FGD	:	*Focused Group Discussions*
FICTC	:	*Facility-integrated counselling and testing centres*
FSW,	:	*Female sex workers*
HCT	:	*HIV counselling and testing*
HIV	:	*Human Immunodeficiency Virus*
HQ	:	*Headquarters*
HRGs	:	*High-Risk Groups*
HSS	:	*HIV Sentinel Surveillance*
IBBS	:	*Integrated Bio-Behavioural Surveillance Survey*
ICTC	:	*Integrated Counselling and Testing Centres*
IDIs	:	*In-depth interviews*
IDU	:	*Injecting drug users*
IEC	:	*Information Education Communication*
IMS	:	*Inventory Management System*
IUT	:	*Inter Unit Transfers*
JD	:	*Joint Director*
KSACS	:	*Karnataka State Aids Control Society*
LFU	:	*Loss to follow-up*
MSM	:	*Men who have sex with men*
MTA	:	*Mid Term Appraisal*

NACO	:	*National AIDS Control Organization*
NACP	:	*National AIDS Control Programme*
NARI	:	*National AIDS Research Institute*
NDAP	:	*National Data Analysis Plan*
NEQAS	:	*National External Quality Assessment Scheme*
NGO	:	*Non-Governmental Organizations*
NISG	:	*National Institute for Smart Governance*
NRL	:	*National Reference Laboratories*
OSACS	:	*Orissa State Aids Control Society*
OST	:	*Opioid Substitution Therapy*
PALS	:	*ART Linkage System*
pCoE	:	*Paediatric Centre of Excellence*
PD	:	*Project Director*
PLHIV	:	*People Live with HIV*
PPP	:	*Public-private partnership*
PPTCT	:	*Prevention of parent-to-child transmission of HIV*
Pus	:	*Peripheral units*
QMS	:	*Quality Management System*
RE	:	*Revised estimates*
RNTCP	:	*Revised National Tuberculosis Control Programme*
RTI	:	*Reproductive Tract Infections*
SA ICTC	:	*Stand-alone Integrated Counselling and Testing Centres*
SACS	:	*State AIDS Control Societies*
SBCC	:	*Social Behaviour Change Communication*
SDGs	:	*Sustainable Developmental Goals*
SIMS	:	*Strategic Information Management System*
SRL	:	*State Reference Laboratories*
STI	:	*Sexually Transmitted Infections*
TB	:	*Tuberculosis*
TG	:	*Transgender*
TI	:	*Targeted Interventions*
TRG		*Technical Resource Group*
TSG	:	*Technical Sub-Groups*
UPSACS	:	*Uttar Pradesh State Aids Control Society*
VBD	:	*Voluntary Blood Donation*
WHO	:	*World Health Organization*

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Executive Summary

Background

The National AIDS Control Programme (NACP) has transformed the lives of the People Living with HIV from a virtual death sentence in the 1990s to chronic manageable disease in the decade of 2010s due to introduction of Antiretroviral treatment. The Programme has shifted the focus from just raising awareness to behaviour change, and from a national response to a more decentralized response by increasing involvement of NGOs and networks of People Live with HIV (PLHIV). The National AIDS Control Organization (NACO) is the nodal organisation for national AIDS response has implemented four phases of NACP and NACP Phase-IV (Extension) 2017-20 as a 100% central sector scheme.

Targets under NACP-IV& Extension Period

By 2020, the focus of the NACP is to achieve the following fast track targets:

(i) 75% reduction in new HIV infections,

(ii) 90-90-90: 90% of those who are HIV positive in the country know their status, 90% of those who know their status are on treatment and 90% of those who are on treatment experience effective viral load suppression,

(iii) Elimination of mother-to-child transmission of HIV, and

(iv) Elimination of stigma and discrimination

The targets for NACP-IV extension were to ensure:

- More than 99% of the population will be kept HIV free.
- More than 70 lakh of key population covered annually through a comprehensive HIV prevention programme.
- Around 15 Crore of a vulnerable population (including five crore pregnant women) will be tested for HIV in three years of the project.
- Two Crore Thirty-Two lakh (2,32,00,000) units of blood will be collected at NACO's supported blood banks during three years of the project.
- Two crores Eighty-Two lakh episodes of sexually transmitted infections will be managed under the project during three years of the project.

- Seventeen lakhs of PLHIV will be put on free anti-retroviral treatment by the end of the project period.

NACP IV Strategy

NACP used a comprehensive three-pronged strategy of prevention, testing and treatment supported through critical enablers of Information Education Communication (IEC), Laboratory Services and Strategic Information. Communities are at the centre of response and equity, gender, and respect for the rights of communities were continuously adopted as guiding principles.

Need for Evaluation

As the planned extension period is going to end in March 2020, to consolidate the achievements and to identify gaps at the end of NACP-IV National AIDS Control Organisation has commissioned this end-term evaluation. This external third-party evaluation was undertaken by the Indian Institute of Public Administration (IIPA), New Delhi from May to December 2020.

Study Objectives

- To review the policy, strategy, action plan development process at national, state & district levels
- To evaluate the key outputs and achievements of the programme
- To document the processes in the development & roll-out of key programme strategies & new initiatives
- To assess cross-cutting programme management systems
- To identify key issues affecting the implementation of different programme components
- To provide recommendations for improving the next phase

Research Methodology

A longitudinal study design (2012-2020) with the World Health Organisation's Health System framework was used for meeting the above objectives. The study used mainly qualitative research approach by using both primary and secondary data sources. The primary data was collected after mapping multiple stakeholders in the form of online in-depth discussion, in-depth interviews during field visits, focus group discussions during field visits and E-Consultation Workshops. In-depth

Interviews guides consisting of questions on status, innovations, performance gaps, issues, challenges, and way forward were used this purpose. Other than interactions with Programme divisions of NACO HQ Divisions, Six State AIDS Control Societies (SACS) – Uttar Pradesh, Maharashtra, Delhi, Manipur, Karnataka, 2 TSU i. e. Delhi and Karnataka and physical field visits were carried out in the facilities of Ghaziabad and North West Delhi. Further, telephonic interviews/written interviews were carried out with the district level-based organisations/centres. On the social contracting front, IDIs were also carried with TI Staff, TI Service Providers at Ghaziabad, and Delhi, Focus Group Discussions were done with People Living with HIV (PLHIV), Transgenders, Injecting Drug Users, Men who have Sex with Men, and Female Sex Workers during a field visit. E-Consultation Workshops include a consultation workshop with Development & Implementation Partners and Consultation Workshop with NACO leadership post field analysis.

Limitations of the Study

The study has few limitations mainly due to mobility restriction posed by COVID-19 as a result of which most of the findings are based on online interaction and discussions with all stakeholders. These interactions further affected by poor Internet connectivity issues. They lacked real-time experiences of interactions in the field functionaries at diverse locations in the country.

Key Findings

The NACP IV and its extension phase was characterized by several macro-level changes include i) changes in administrative structure i.e., NACO becoming a division of Ministry from being an independent Department of AIDS Control of the Ministry of Health and Family Welfare. ii) Enactment of HIV Prevention & Control Act 2017 iii) Launch of National Health Policy 2017 iv) Cross linkages of TB service delivery with HIV/AIDS access points v) Launch of Sustainable Development Goals in 2015 vi) COVID-19.

Overall Performance and Achievements

NACO and NACP-IV (2012-2017) and extension phase (2017-2020) has done a commendable job of the task at hand and performed very well despite a series of significant transitions, trials, and turbulences. The unique strengths that contributed to the success of NACP in India include prevention-focused policies, evidence-driven strategies, community-centric approaches, constant

innovations, dynamic multi-stakeholder response, openness for innovation and country stewardship. NACP-IV and the extension phase largely achieved the goals and targets set out (90:90:90) at the initiation of NACP-IV and revised in the extension phase despite significant changes and challenges in the programme period. The achievement of these targets varied widely. The Leadership, Management and Governance of NACP-IV and its extension Phase have responded and adapted well to the changing environment and needs and requirement of the constituents' and stakeholders including community and partners. The output and outcomes of the programme can be further better achieved by converting weakness into opportunities. Some of the challenges faced by the programme include supply chain disruptions caused by lengthy procurement processes, human resource shortfalls due to high attrition rate caused by low payment structures and lack of capacity building initiatives; lack of dedicated leadership and oversight at SACS and DAPCU level; lack of coordination between different actors across the various level.

Specific Performance and Achievements of Goals and Targets

The NACP response has been successful over the years which is reflected from the recent India HIV Estimates, 2019. In India, there were an estimated 23.49 lakh (2.35 million) People Living with HIV (PLHIV), with an adult HIV prevalence of 0.22% in 2019. Children living with HIV comprised 3.4% of the total PLHIV estimates. HIV-infected women constituted around 44% of the total estimated 15+ years PLHIV. There were 69.22 thousand new HIV infections in 2019 which has declined by 37% since 2010. There were 58.96 thousand AIDS-related deaths in 2019, which has declined by 66% since 2010. This rate of decline in India is much better than the global average of 23% decline in new HIV infections and a 39% decline in AIDS-related deaths.

Targeted Interventions

In the NACP Phase, IV targeted interventions for high-risk groups (Female Sex Workers-FSW, Men who have Sex with Men-MSM, Transgender /Hijra- TG/H and Injecting Drug Users-IDU) and bridge population (migrants, truckers) were aimed to keep these population HIV free through awareness generation, safe behaviour promotion, Sexually Transmitted Infection (STI) management, condom promotion, harm reduction, HIV testing etc. The Mid Term Appraisal of the NACP identified gaps in the Targeted Interventions (TI) programme. In the extension period, the programme revamped its strategy to improve the coverage of Key Populations by strengthening community and civil society partnerships and upgrading the guidelines for population size estimation and validation. As a result

of which, though the number of TIs decreased, the population covered by them has been increased. However, considering behaviour change in targeted population in recent years (physical space i.e., brothel-based model to virtual platforms; rising number of IDU cases after COVID 19) reaching out to targeted population will be a challenging affair. TI division needs to rehash its strategy to address a combination of traditional and modern population in the next phase.

IEC, Advocacy, Mainstreaming & Youth

Stimulating IEC strategies by shifting focus from mere information sharing to Social Behaviour Change Communication with interactive formats to encourage dialogue and participation was highlighted as a gap area in NACP III. NACP IV strengthened IEC activities to Strategic communication for enabling environment, adopted a more strategic approach in harnessing channels for specific audience segments such as migrants and Men who have sex with Men requiring communication channels beyond the traditional ones. Communication material was also developed on emerging priority areas: Positive Living including Positive Prevention, HIV-TB Linkage, new PPTCT regime, OST, overdose management, and materials specific to Injecting Drug Users and Female Injecting Drug Users, Stigma & Discrimination. National Helpline 1097 was expanded during the extension phase of NACP IV. Sustaining and strengthening initiatives to reach out to adolescents and youth needs to be maintained. The study team observed that with high focussed on TI and CST IEC efforts, the focus on general population and youth and migrants has taken a lag. Further, due to lack of strategic planning, technical capacity and procurement issues at states IEC budgeted mostly utilized on other programme components. Moreover, the IEC efforts need to bring focus on Stigma and Discrimination needs in IEC campaigns.

NACP IV tried to ensure availability of social protection benefits to the key population through its advocacy & mainstreaming efforts with various departments, institutions, private sector, and civil society. NACO has signed 18 Memoranda of Understanding (MoUs) with key Ministries/ Departments of Govt. of India. In the extension phase of NACP-IV Adolescent Education Programme (AEP) has been reviewed and restarted in some of the states. However, the expectation of the targeted community is increasing on providing the right dietary support and job-oriented skills on which they should be discriminated at the workplace.

The Government of India provided a legal framework to the rights of People living with HIV and those infected and affected by HIV/AIDS by enacting the HIV and AIDS (Prevention & Control) Act,

2017. Notification of the rules has been undertaken in the States. The Act prohibits discrimination or unfair treatment of HIV-infected people on any grounds.

Basic Services Division

Improve detection through strong linkages with other components was a concern highlighted during various evaluations. The programme rolled out newer strategies such as community-based screening to take testing to the community in camps, during village health sanitation and nutrition days. NACP provides HIV testing services for early detection of HIV infections at more than 31,000 facilities. HIV testing is mandatorily accompanied by counselling making it a unique feature of the programme. The number of stand-alone Integrated Counselling and Testing Centres (SA-ICTC) has increased by 5.5 per cent only in the last eight years. The number of facility-integrated ICTC (F-ICTC) increased by 3-fold in the previous eight years. General Individual HIV testing has increased by three-fold. Focus on STI/RTIs has reduced over the years and needs to be brought back to evolve a strong response to tackle the re-emergence of STIs/RTIs. A mechanism needs to strengthen STI programme management through the involvement of apex centres, rational use of counsellors, ensuring a timely and adequate supply of essential commodities, etc. The improve the programme outcome new rounds of HIV Mapping are required to be the focus area in the next phase. Further, capacity building efforts for the counselling staff needs to be augmented to meet the challenges of reaching the unreached and clients coming to misinformation obtained with Google search.

Care Support and Treatment

Midterm review of NACP IV pointed out that the output of CST division activities was affected by delayed diagnosis, sub-optimal scale-up of Second-line ART, sub-optimal HIV-TB coordination, non-uniform quality of care across ART centres & overcrowding of ART centres and inadequate availability of drugs to treat Opportunist Infections. NACO has adopted the 'Test and Treat' policy aligned with the WHO guidelines as well as to enhance the uptake of treatment services. Under the Test and Treat policy, approximately 50,000 PLHIV who were lost to follow-up were linked back to Anti-Retroviral Treatment services through the 'Mission SAMPARK'. Currently, there is 14.68 lakh (1.46 million) PLHIV on ART. The programme has also introduced simpler, harmonized and efficacious treatment regimens that will promote retention in care, which remains a global challenge. The policies of differentiated services delivery and multi-month dispensation have been other significant advancements adopted by NACO. Various models of 'Differentiated Service Delivery' at

the Anti-Retroviral Therapy (ART) centres, Multi-Month Dispensation of Antiretroviral drugs, the dispensation of medicines closer to home and other such models which are aimed at decongestion of ART centres are being piloted and adopted under NACP IV extension period. In the next phase, NACO should choose above successful models with the help of operational research to improve the programme outcomes. Further, the service providers need to be trained on soft skills so that PHLIV patients and HRGs should not feel discriminated while visiting health facilities. To enhance the effectiveness of single window delivery of TB and HIV services, the facilities need to be reorientated to prevent infection transmission and staff needs to be enhanced to cater to the increased patient load. The NARI Impact Evaluation Study showed that overall, cost-effectiveness ratio over the five years was Rs. 118,730 or $ 1827 per DALY averted. The yearly incremental cost-effectiveness ratio came down from about $5000 to $1458 in the study period and was found to be below per capita gross domestic product (GDP) in 2017. Hence, the ART under NACP in India was very cost-effective.

Laboratory Services

The utilization ratio of labs over the whole of NACP-IV and extension period is more than 100%. During the NACP-IV period, all HIV reference laboratories at the national level got quality accreditation. Similarly, 72% of state reference laboratories also got quality accreditation certificate. Since its launch on 26 February 2018, the programme has progressively introduced routine viral load testing for all PLHIV, initially through a public-private partnership and thereafter, through 64 molecular laboratories set up by the Government in the public sector. During COVID 19 period the lab laboratories became a useful infrastructure of COVID testing as well. To cater to the increased workload the capacity of these laboratories needs to be enhanced by adding updated technology machines and trained manpower.

Strategic Information Unit

Strategic Information (SI) unit has played a critical role in providing the evidence base to NACP through its robust system of programme monitoring, surveillance and epidemic monitoring and research and data use. Regular improvements in the SI system and establishing strong networks with its ecosystem has contributed to decision making at national, state and district level. Geo-prioritization using newer evidence available is being applied for customized programming. During the field visit the study team observed at district and facility level records are still maintained

manually, which hinder real-time recording, monitoring of information, data mismatch and slow decision making.

Information Technology

Integration of all information technology (IT) applications operating under NACP with SIMS to facilitate strong linkages and individual patient tracking across various components of NACP was identified as a critical challenge for the programme. In recent years, there has been a move towards real-time monitoring, feedback, and action at the sub-national level. Under Project SOCH, an IT-enabled patient-centric management system capturing real-time data entry with user access and prompt data reports/ analytics is being developed to help the programme managers and policymakers to take corrective measures and monitoring at grass-root level. In the next phase, NACP should focus on creating a centralized online registration and tracking system for HIV Patients.

Blood Transfusion Services

From 2012-13 to 2019-20 total collection of blood across the country has been increased by 170 folds. Further, NACO supported blood banks has been increased by 76%. The study team observed that the multiplicity of controls at central level for policy, regulation and the programme management causing delays in decision-making. Other key challenges observed include sub-optimal functioning of SBTCs in some of the States, inequitable distribution of blood, low voluntary blood donation collection, demand-supply gaps and issues in strengthening blood component separation and use.

Recommendations and Way Forward

Overall Strategic Thrust and Leadership and management support

- The NACP approach which has worked well so far, there needs to be a paradigm shift towards scaling up efforts under the programme to achieve the Sustainable Development Target of "End of AIDS by 2030".
- This requires focused prioritization, reorganization, resource optimization, building capacities and leveraging partnerships, to consolidate the gains and move steadily forward towards the last mile and achieve the desired targets and impact.
- Top leadership and management team at NACO and SACS have been very articulate and supportive during these changing times of the 8 years in the NACP-IV and extension period.

Strong leadership and management team is required to run such as large scale and complex program and Policy makers should continue to support these efforts by keeping the strong and supportive leadership and management team at HQ and States.

- An assessment of Indian context concerning the latest global fast track targets especially in the COVID-19 scenario shows that reaching the targets is challenging, but achievable, with focused and reinvigorated efforts to address the critical bottlenecks and ensure rapid implementation of last-mile strategies in the coming years with the strong leadership and management team and professional staff down the line.

Unique Vertical Nature of the Program Design

- Considering the uniqueness of HIV/ AIDS on one end as a manageable chronic disease requiring life-long medication; and on the other end the stigma and discrimination attached with the infection and those infected, it requires a different approach than the general health system. NACP is a vertical programme would do more justice to meeting the service requirement of marginalized communities and people living with HIV/AIDS, who might find it exceedingly difficult to access services from the mainstream. Integration and mainstreaming with General health system efforts should continue to be explored and piloted for the long-term strategy.
- Considering the cross-cutting nature of engagements with different stakeholders within the program and outside the health system and Departments/Ministries vertical nature of the program with a centralized focus on HIV prevention control and treatment is must ensure the end of the pandemic in the targeted time-period.

Strengthening State Leadership

- NACO should continue and emphasize on building State leadership with design and implementation tailored to changing programme needs to ensure quality and desired outcomes. Clear time-bound performance and accountability matrices should be developed for State-level programme planning, implementation, and achievements.
- Against the backdrop of changing HIV epidemic scenario and expansion of services delivery approaches, the presence of District AIDS Prevention and Control Units (DAPCUs) can be leveraged to monitor the HIV programme across priority districts.

- DAPCU led single-window model in all DAPCU districts should be further strengthened and streamlined. Specific guidelines and measurement matrices for the same should be developed and ensured compliance.

HIV Testing and Counselling Skills

- HIV testing continues to be linked to mandatory counselling, confidentiality, informed consent, and an individualized linkage of those tested positive to treatment services. This needs a dedicated, trained and skilled workforce to be recruited and retained in the programme.
- Further, capacity building needs to be continuously undertaken for programme management and service delivery staffs to keep them always updated.

Smooth Convergence and Leveraging Synergy with Partners & Resource Optimization

- NACO should leverage synergy and resource optimization with related schemes and programmes under the health systems and ensure smooth convergence. Metrices and process should be developed to measure the convergence and partnership efforts to be captured in the SI framework.
- However, efforts must be ongoing to explore and identify as well as develop network partners within and outside health system like the ministry of skill development entrepreneurship, Fit India Initiatives, Ministry of Social Justice etc.
- Model of Uttar Pradesh SACS in collaboration with State Prisons Department (SPD) for Prison welfare without any external support has the potential to be replicated in other States.

ART and STI/RTI Services Quality, Retention and Adherence

- ART programme has been expanding in NACP-IV with more PLHIV being put on treatment. Adherence and retention would need to be focused on. Interventions on differentiated service delivery models, advanced disease management, death audit, verbal autopsy need to be adopted for better patient management and improving service delivery.

- The focus on STI/RTI programme needs to be strengthened. Models to reach out to at-risk populations, STI clinic attendees with a comprehensive service package to be piloted and adopted in the national programme.

Evidence-based IEC/BCC/SBCC Strategy Development, Tracking and Evaluation

- IEC, Mainstreaming, AEP and youth strategies need to build new evidence-based strategy development responding to the new dimensions and aspects that are emerging in the ecosystem as well as the program design at different levels. This will be required formative research and analysis which should be done at the earliest.
- The SACS should be encouraged to develop state-level Communication strategies based on formative research/CNA. These strategies should be the basis for IEC programme design as well as develop quantitative and qualitative SMART indicators and tracking and reporting formats which should be analyzed and disseminated widely and shared on social media and online platforms.

Review Policies, Guidelines and Strategies for better implementation designs

- Policies, guidelines, and strategies need to be reviewed and updated to ensure the reduction in implementation time, cost and fast response for integration.
- Revisions in Policies, guidelines, strategies should be worked out faster and sharing and dissemination to all SACS and other partners should be ensured in local languages and for different segments of targeted audiences.

Robust Strategic Intelligence and Management Unit

- 'Strategic Unit' needs to be established at NACO to focus on programme management such as partner management, consolidate field intelligence, strengthen community engagement. This unit will aim to mainstream efforts in a coordinated synergized manner at each level.
- Evidence driven planning and implementation under NACP with a complementary and robust Strategic Information system shall be further enhanced and expanded to generate, analyze, and disseminate high-quality action-oriented evidence.
- The IT-enabled Artificial Intelligence-based client-centric management system should be made operational to for tailored service delivery, IEC activities, programme management and monitoring, and avoid data duplication.

Rework HR Policies and Update Market Competitiveness

- Considering cross-cutting specialization and work required Human Resource Department should rework its policy and work towards matching staff requirement and salary/remunerations to attract and retain better talent to make a big difference and less vacant positions and attrition.
- Ensuring filling of vacancies with appropriate measures and proactive follow up as well as competitive compensation packages as well as other incentives, perks and benefits should be explored.

TA and Development Partners Engagement and Contribution

- Partnership and Technical Assistance coordinated engagement and response mechanisms should be developed to contribute to the improved quality and efficiency of the program without being over-dependent but ensuring the actions and learning are integrated at scale.
- A robust platform and mechanism should be developed for TA Partners and Development partners so that their engagement and contribution is streamlined and tailored and utilised in a leveraged manner and tracked and measured and any delays or overlaps are minimised and quality outputs and response time is made more efficient and agile.
- For effective community mobilization or crisis management in TIs, the potential of community participation and engagement strategy should be optimized by using community systems strengthening (CSS) approach in the next phase of NACP.

Understanding COVID -19 Implications on the Program in the Long Run

- A specific policy element to understand and address how COVID will affect the short to medium term HIV/AIDS scenario and impact should be developed on priority.

Conclusion

NACO and NACP-IV (2012-2017) and extension phase (2017-2020) has done a commendable job of the task at hand and performed very well despite a series of significant transitions, trials, and turbulences. The unique strengths that contributed to the success of NACP in India include prevention-focused policies, evidence-driven strategies, community-centric approaches, constant

innovations, dynamic multi-stakeholder response, openness for innovation and country stewardship.

NACP-IV and the extension phase largely achieved the goals and targets set out (90:90:90) at the initiation of NACP-IV and revised in the extension phase despite significant changes and challenges in the programme period. The achievement of these targets varied widely.

The leadership, management and governance of NACP-IV and its extension phase has responded and adapted well to the changing environment and needs and requirement of the constituents' and stakeholders including community and partners. The output and outcomes of the programme can be further better achieved by converting weakness into opportunities by incorporating the above-mentioned recommendations.

Chapter 1 Introduction

Background

The **National AIDS Control Programme (NACP)**, launched in 1992, is being implemented as a comprehensive programme for prevention and control of HIV/AIDS in India. NACP has transformed the lives of the People Living with HIV from a virtual death sentence in the 1990s to chronic manageable disease in a decade of 2010s due to introduction of Antiretroviral treatment. Over time, the focus has shifted from raising awareness to behaviour change, from a national response to a more decentralized response and increasing involvement of NGOs and networks of People Live with HIV (PLHIV). National AIDS Control Organization (NACO) is the nodal organisation for the national AIDS response. In States/UTs, programme management is done through State/ UT AIDS Control Societies (SACS) and District AIDS prevention and control unit (DAPCU) in 188 high priority districts. The Cabinet Committee on Economic Affairs chaired by the Prime Minister gave its approval for continuation of National AIDS Control Programme-IV (NACP-IV) beyond 12th Five Year Plan for a period of three years from April 2017 to March 2020. The targets for NACP-IV extension were to ensure:

- More than 99% of the population will be kept HIV free.
- More than 70 lakhs of key population covered annually through a comprehensive HIV prevention programme.
- Around 15 crores of a vulnerable population (including five crores pregnant women) will be tested for HIV in three years of the project.
- Two crores Thirty-Two lakhs (2,32,00,000) units of blood will be collected at NACO's supported blood banks during three years of the project.
- Two crores Eighty-Two lakhs episodes of sexually transmitted infections will be managed under the project during three years of the project.
- Seventeen lakhs of PLHIV will be put on free anti-retroviral treatment by the end of the project period.

NACP Strategic Approach

National AIDS Control Programme (NACP) is a 100% Central Sector Scheme implemented through

36 State AIDS Control Societies and one Mumbai District AIDS Control Society in States/UTs for prevention and control of HIV/AIDS. NACP response to the HIV/AIDS epidemic in India comprises a comprehensive three-pronged strategy of prevention, testing and treatment supported through critical enablers of Information Education Communication (IEC), laboratory services and strategic information management. Communities are at the centre of response and equity, gender and respect for the rights of communities were continuously adopted as guiding principles. The key to strategies for NACP IV was:

- **Strategy 1:** Intensifying and consolidating prevention strategies, with a focus on HRGs and vulnerable populations.
- **Strategy 2:** Increasing access and promoting comprehensive care, support, and treatment.
- **Strategy 3**: Strengthening IEC services (a) general population and (b) High-risk groups with a focus on Behaviour change and demand generation.
- **Strategy 4:** Building capacities at National, state, district, and facility levels.
- **Strategy 5**: Strengthening Strategic Information Management Systems.

Literature Review

In recent times, several HIV/AIDS-related studies have been conducted In the Indian context. Some of the significant relevant studies have been referred to the conduct of this study that is mentioned below.

In the Year 2017, *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) on* **Evaluation of NACP in coastal Karnataka, based on field observations at a Community Health Centre.** The observation was done during the field in various Primary Health Care and Community Health Care centres in the coastal region of Karnataka. All the observations were made specific to the activities under NACP.

Some of the observations and findings from the study are-

1. ICTC centre was attached with the CHC visited.
2. Free condoms were available.
3. Routine HIV counselling's to all the pregnant women were given who were availing the services from the centre.
4. Thus it can be concluded that CHC was accessible and has essential facilities. But there were

many gaps recorded which exist mainly because of unavailability of permanent staff by which most the workload came to other staff and after having good ability they didn't perform well in their respective works as they have to handle many other activities too. The existing staffs are inefficient in many places.

5. The CHC has a good IEC system with lots of information through wall charts, pictures, pamphlets, and posters providing information to the patients and community members. The community health care workers give follow- up care to mother and child. Regarding health education, there is the active participation of community too which is very important to eliminate this disease from the world.

To combat the epidemic of HIV/AIDS in India National AIDS Control Organization (NACO) has expanded the reach of anti-retroviral therapy (ART) among the people living with HIV/AIDS in the world. Persistent adherence to medication dosing schedules and regular visits to ART centres are one of the major challenges related to ART. Hence, the study was carried out to assess the drug adherence rate and loss to follow-up (LFU) among PLHIV attending ART centre of a tertiary care hospital in Western India. The cross-sectional study design was used using medical records of all patients registered at ART Center, Shree Sayaji General Hospital, Vadodara. LFU was classified according to NACO guidelines. Data were collected using a standardized data extraction form as per NACO treatment card. It was found that out of 755 PLHIV registered at ART centre, 534 (70.7%) subjects were alive on ART, 61 (8%) were transferred out, 68 (9%) died, and 92 (17%) were LFU. Nearly, 57% PLHIV have drug adherence rate of more than 95%. Education status of the participant showed independent and significant association with drug adherence. Thus, it can be concluded that 57.3% were adherent to ART among PLHIV, whereas 17.22% were lost to follow-up. Hence, there is a need to emphasize on increasing drug adherence rate and on outreach activities to combat LFU.

Similarly, an impact evaluation on ART has also being conducted by the National AIDS Research Institute (NARI). The key findings and recommendations are mentioned in Figure 1.2.

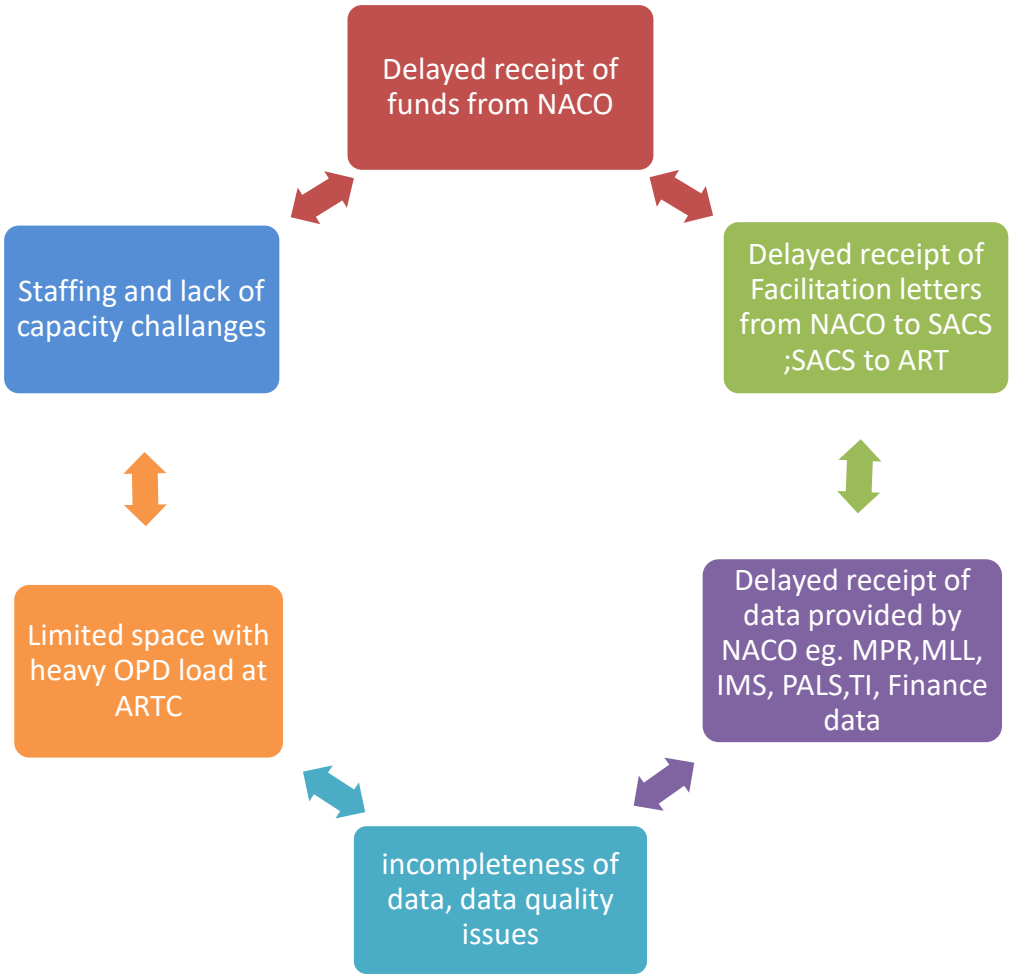


Figure1.2 Key Issues and challenges faced

Key Recomendations

- LFU- Tracing patients who miss ART appointment
- Data management and data sets- Central repository and Data diectory
- Unification of data sets, indicator variables, and data quality assuarance
- Use of digital Technology for data Collection
- Timely Linkage to ART centres
- Commisioning of research by NACO

One of the latest studies i.e. Mid Term Appraisal of NACP phase IV was conducted in 2016 which highlighted the progress of NACP-IV and documented achievements, opportunities, challenges of the

programme, with some recommendations for the planning to NACP V. Few findings and recommendations of the MTA study has been tabulated below.

Findings	Recommendations
TI	
Budget cuts, fund flow and financial uncertainties	Adapt TI strategies to match the changing dynamics of bridge and key populations
Context-specific BCC and IEC materials are required	Revitalize IEC strategies by shifting to interactive formats, harnessing channels for a specific audience segments such as migrants & MSM, upgrading the IEC material and making it relevant to the changing context and new programme guidelines
STI	
Inadequate spouse/ partner testing **Lack of training and skill-building in the field due to constrained resources** **Quality assurance mechanisms of Syphilis testing**	Strengthen STI programme management through the involvement of apex centres, rational use of counsellors, and ensure a timely and adequate supply of essential commodities. Target efforts towards elimination of parent to child transmission of HIV and Syphilis
BTS	
The multiplicity of Controls at Central level for policy, regulation and programme with lack of coordination is resulting in inefficient handling of BTS **There is a lack of State ownership to operationalize SBTCs in some States**	Strengthen the functioning of NBTC & SBTC in all States through the provision of adequate resources
HR	
High turnover and large no. of vacancies	Focus on institutional strengthening – filling vacancies, capacity building and strengthening supervision to reinvigorate the program
Finance	

Weak maintenance of accounts (settlement of advance) in peripheral units (PUs) and TIs and weak controls (large cash payment) in some TIs	Streamline financial management at SACS and the peripheral units for effective transfer and utilization of financial resources

Need for the Study

As the planned extension period has been ended in March 2020, to consolidate the achievements and gaps at the end of NACP-IV National AIDS Control Organization has commissioned this end-term evaluation. This evaluation has documented the key processes that led to significant scale-up of HIV/AIDS services and innovations during that period.

Objectives of the Study

The main objective of this evaluation was to assess and document the progress made in the implementation of services under the extended fourth phase of the National AIDS Control Programme. The specific objectives of the evaluation:

1. To review the policy, strategy, action plan development process at national, state & district levels,
2. To document the processes involved in the development and roll-out of key programme strategies and new initiatives under NACP- IV & its extended phase,
3. To assess cross-cutting programme management systems including organizational structures and human resources, financial management, strategic information management, procurement & supply chain management and other support structures involved in programme implementation,
4. To evaluate the key outputs and achievements of the programme in terms of service delivery, outreach, access to different population groups etc, and
5. To identify key issues affecting the implementation of different programme components to provide recommendations for improving them.

Methodology and Execution Strategy

To meet the above assessment study objectives, a longitudinal study design was designed and

conducted. The study has used the mixed-method research approach i.e. both qualitative and quantitative research approaches have been used. For reviewing and documenting the performance of the programme, the World Health Organization (WHO) suggested the Health System Framework for building and strengthening health systems to secure better health outcomes as depicted in Figure1.1.

Source: WHO Figure1.1 The WHO Health System Framework

The study team has evaluated the NACP-IV on six building blocks i.e.

1. Effectiveness of delivery service to the beneficiaries
2. Effectiveness and completeness of SIMS and monitoring data
3. Adequacy and availability of required behaviour, competencies and capacity building programme
4. Governance mechanism, ownership, and leadership
5. Adequacy and effective management of financial resources
6. Effective procurement and supply chain management for Anti-Retroviral Treatment (ART) programme, drugs, supplies and lab services equipment

The output and outcome of the programme have been analyzed based on the extent of coverage, quality of services being provided to the beneficiaries, the trust level between the beneficiaries and the service providers, measuring the safety standard requirements, on basis of the efficiency of multiple services that are being provided, the efficacy of the system, the provision of the social risk protection and the extent of the behaviour change.

Data Sources

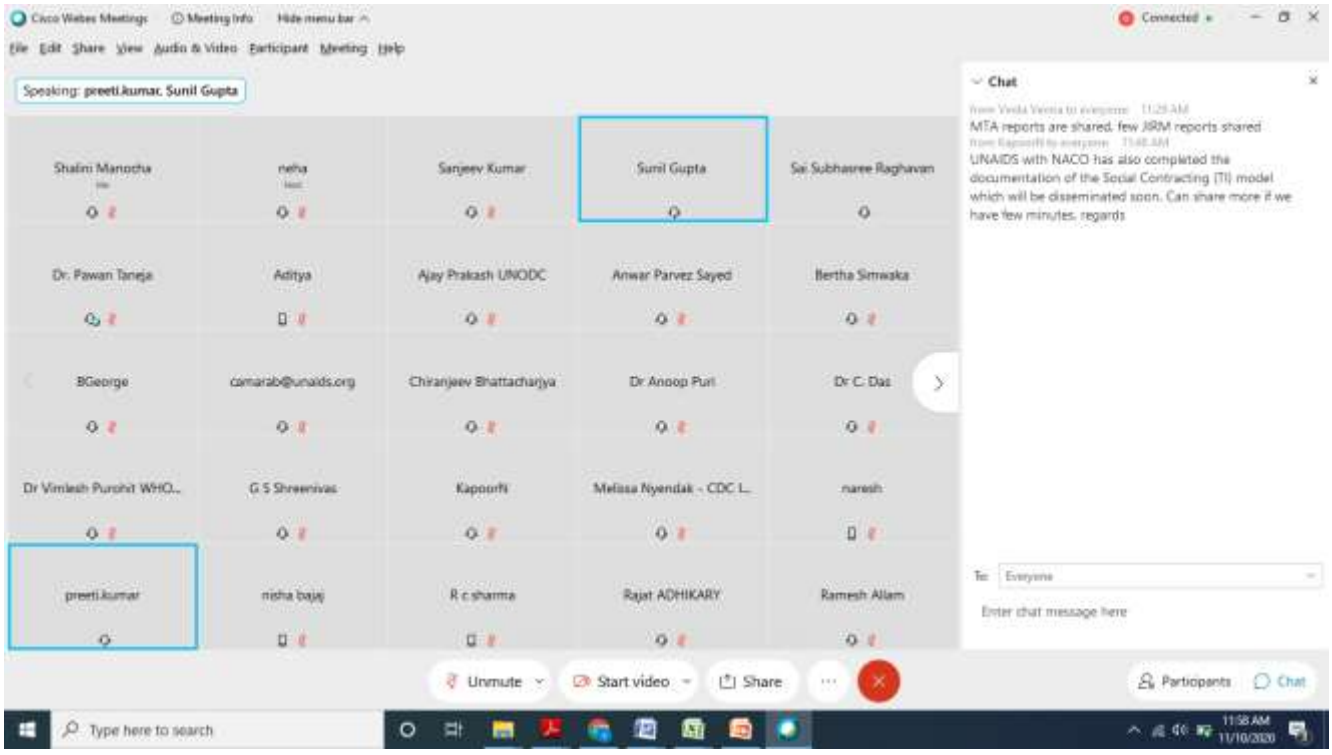
For the study, a combination of both primary and secondary data sources has been used. The various sources have been detailed in the next section. Secondary data includes:

- Annual reports of MoHFW
- Various NACP programme reports like HSS 2016-17, HSS plus 2019 central prison sites, IBBS 2014-15, and impact evaluation of ART under NACP 2012-17, early infant diagnosis of HIV infection in India 2017 report, NFHS 4 2015-16 etc.
- Indicators and data from programme reporting (SIMS) like the number of general clients tested for HIV, number of pregnant women tested for HIV, number of blood units collected in the NACO supported blood banks, number of STI/RTI managed, number of people living with HIV on ART etc.
- Published programme documents e.g., annual reports of last 8 years of NACO & SACS, MTR reports, National Strategic Plan for HIV & STI, 2017-24, JIRM reports, outcomes defined in the EFC document, reports of studies and assessments conducted under the programme, NACP–IV working group reports and material, meeting reports, training reports, and other document relating to programme implementation available at national or state levels.

Due to movement restriction posed by COVID 19, the primary data has been collected in three ways. Firstly, online interactions with the key functionaries of NACO in various divisions, State AIDS Control Societies, District AIDS Prevention and Control Units (**DAPCU**), Development & Implementation Partners and TSUs. Secondly, field visits were carried out in Delhi NCR for in-depth interviews with functionaries at various facilities like ART Centre, Centre of Excellence, ICTC, OST

centre, Blood Bank, STI/RTI clinics, TIs and focus group discussion with beneficiaries of different HRGs. Finally, written and telephonic response were obtained from various service providers. All these interviews/interactions/discussions were audio reordered. To address ethical issues, each respondent to the in-depth interview/discussion/Focus Group discussion was explained about the purpose of the study and possible harms. Written informed consent was obtained from every respondent to address the ethical consideration.

Other than above **data sources,** two virtual **National Consultation Workshops** were organized on November 10 and 12, 2020. The first virtual consultation workshop was organised to gain the perspective of various national and international development, technical and implementation partners. The second virtual consultation workshop was organised to discuss the preliminary findings, the issues, challenges faced during the NACP-IV and extension period with various NACO divisions at the national level. During these workshops, the past performance of NACP-IV and extension period was critically analysed to chalk out implementable suggestions for the next phase. The proceedings of these workshops were also audio recorded.

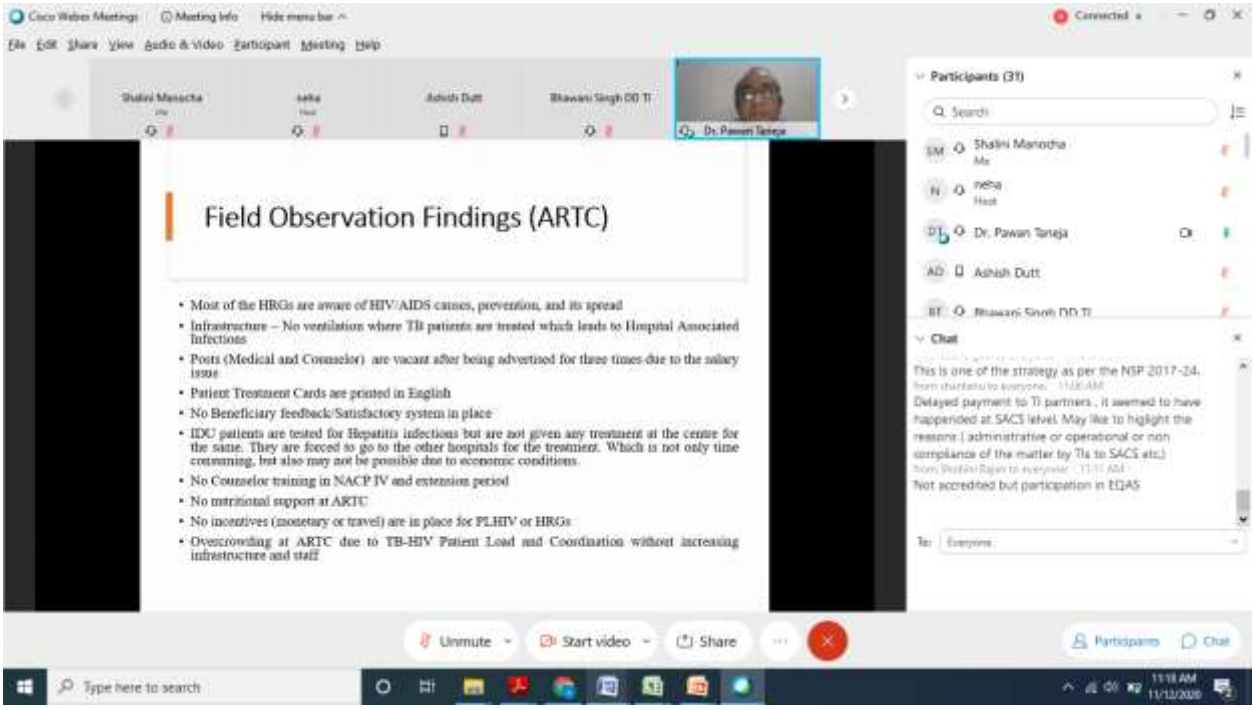


Sampling Framework

As per the available document, HIV in India is heterogeneous with trends and levels of infection varying by population group and geographic location. The risks and vulnerabilities that drive the epidemic in various parts of the country differ. Since it is a national-level study, therefore, to get an appropriate geographical representation, the complete region (in our case, it is the country) has been divided into 5 geographical regions i.e. (i) Northern region, (ii) Eastern region, (iii) Western region, (iv) Southern region, and (v) North-East region. This stratification helped to both high and low prevalence states for a fair representation of the region. From these regions, the study team has selected three states with high prevalence and one state with medium-level and one state with low prevalence. Thus, the selected states are Karnataka from Southern Region, Maharashtra from Western Region, Uttar Pradesh from the Northern Region with high prevalence, Odhisa, from the eastern region with low prevalence and Manipur from North Eastern region with a mid-level prevalence.

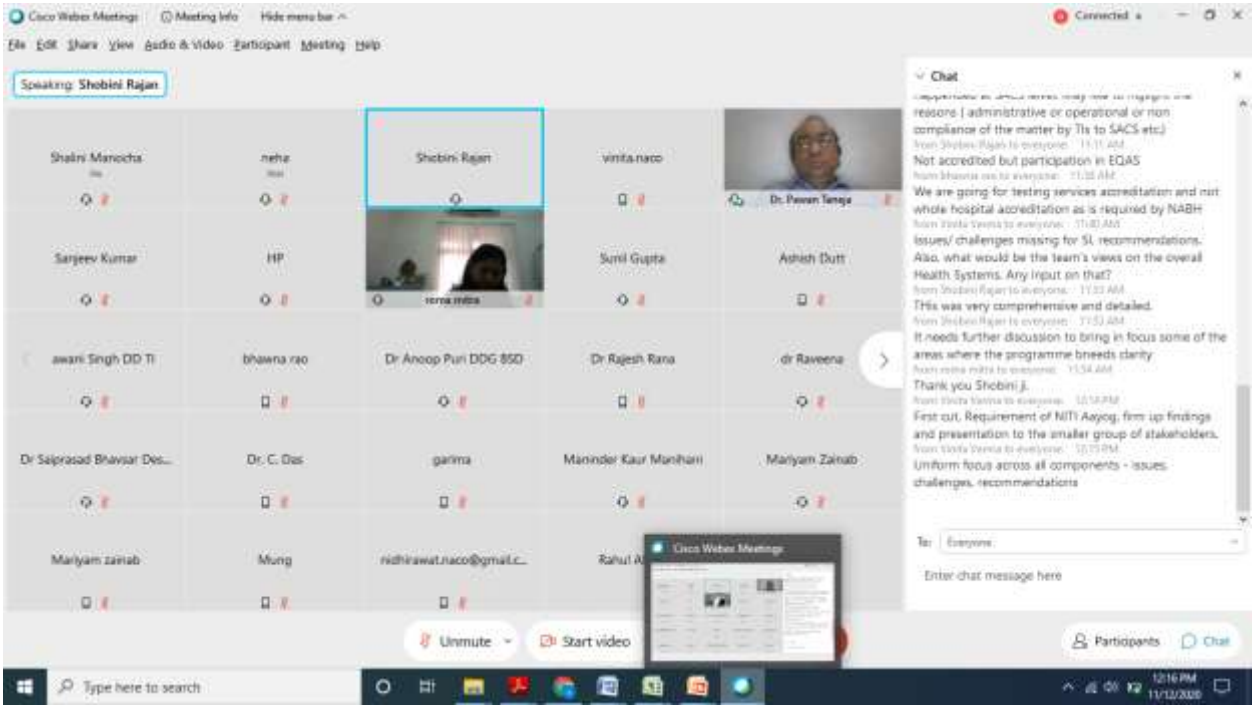
Data Collection

O**nline, in-depth interviews (IDIs)** and discussions **through the virtual platform** with the key stakeholders at the **National level** with different division heads were held from 9th June 2020 to 15th June. Even though the duration of the meeting was fixed as a two-hour slot under the Chairmanship of DDG, NACO, and the duration exceeded the scheduled time due to detailed discussion on relevant aspects. The Additional Secretary/DG, Joint Secretary, ADG, DDG, DD, National consultants, associate consultants, assistant consultants, programme assistant and other officials of respective divisions have participated to make IIPA team understand the programme and workings with the States/SACS. Thirteen (13) such meetings have been conducted.



O**nline, in-depth interviews (IDIs)** and discussions **through the virtual platform** with the key stakeholders at the **state level which was held** from 30 June 2020 to July 7, 2020. Project Director (PD), Joint Director (JD), Deputy Director (DD), Assistant Director (AD) or relevant officials of the respective divisions have participated to make IIPA team understand the implementation activities of the programme at field level as well as the as coordination with HQ and with field and the issues and challenges faced during the implementation. The duration of the meeting was fixed as a two-hour slot with each state, but the duration exceeded the scheduled time and thus meeting has also been rescheduled for further discussions and hence eleven (11) such meetings have been conducted.

Online in-depth discussions with Delhi and Karnataka TSU were held on 22 July 2020 to understand TSU's role and responsibilities, the support offered by them, the issues and challenges faced by them, and also their coordination with key stakeholders at NACO HQ, SACS, Development Partners, DAPCU and with TIs. The duration of the meeting was fixed as a one-hour slot each with both the TSUs but the duration exceeded the scheduled time for further discussions. IDI guide was shared with them by the study team before the meeting (Annexure-1).



Online in-depth discussions with Development Partners and Implementation Partners were held on November 10, 2020, to understand the kind of support offered by them during NACP-IV, the issues and challenges faced by them especially in terms of fund management and utilisation, and also the good learnings, success stories, and other documentation. The duration of the meeting was fixed as a three-hour slot but the duration exceeded the scheduled time for further discussions. IDI guide was shared with them by the study team before the meeting (Annexure-2). Approximately thirty-five (35) people attended this meeting (Annexure-3).

In addition to the above IDIs, the study team has visited MMG Hospital, Ghaziabad on 30 September 2020 and DSACS office on October 01, 2020. During our field visit to Ghaziabad, study team interacted with staff of different departments at their respective facilities like ICTC, ART Centre, OST centre, Blood Bank, STI clinic etc. regarding the services, progress, trends over last 8 years during NACP IV, success stories, lessons learned, issues and challenges faced, related to different components of the programme including the administrative and COVID challenges. The total number of staff participated was twenty-five (25) (Annexure-4). The study team also visited TI IDU, Natural Care, and Abhivayakti Foundation, Loni.


Similarly, in DSACS study team visited different facilities of Dr. Baba Ambedkar Hospital and interacted with the twenty-one (21) staff related to services as mentioned above (Annexure-2). During the visit, the study team also conducted (3) focus group discussion through with the following categories of beneficiaries including:

- One FGD with the People Living with HIV (PLHIV)
- Two FGDs with key population for the targeted invention includes female sex workers, men who have sex with men, transgender & injecting drug users, migrants & truckers.


Data Analysis

The mixed data collected from the various stakeholders have been analyzed by using various statistical tools. The qualitative data has been analyzed by the Content analysis by using coding

techniques. The software Atlas ti8 has been used for the same. However, for the quantitative data, various statistical tools have been employed for a better interpretation of the same. Strategic analysis techniques such as Trend Analysis, SWOT analysis, Financial Analysis of the budget etc. have been conducted on the quantitative data.

Scope and Limitation of the of the Study

This evaluation of the scheme has included an assessment based on inputs, processes and outputs, at an overall programme level and its components such as targeted Interventions, CST, and BST etc i.e. at a macro level but not in detail. The Outcomes and impacts were studied based on secondary data and the nature of the data is qualitative. Further, the study team has not validated the programme monitoring data by the field data. These finding has been checked and supported with qualitative data of IDIs, Discussions and Focus Group discussions with programme beneficiaries. The evaluation has attempted to document the implementation processes at national, state, district levels through interviews of key informants at different levels but due to COVID 19 Pandemic, all the interviews were conducted online through the Virtual platform (using Cisco Webex). Due to which there has been the lack of real-time experiences of interactions.

Chapter 2 Targeted Interventions

The main objective of the Targeted Interventions (Tl) is to improve health-seeking behaviour of high-risk groups (HRG) and reduce their risk of acquiring sexually transmitted infections (STI) and HIV infections. High-risk groups under TI include female sex workers (FSW), men who have sex with men (MSM), transgender (TG)/hijras and injecting drug users (IDU), and bridge populations include high-risk behaviour migrants and long-distance truckers. Targeted interventions provide the information, means and skills needed to prevent HIV transmission and improve their access to care, support and treatment services. These programmes also focus on improving sexual and reproductive health and general health of the high-risk population. All these preventive services in this division have been implemented by NGOs/ Community based organizations (CBO) and mentored and monitored by the SACS, Technical Support Units (TSUs) and NACO.

Performance of Targeted Interventions

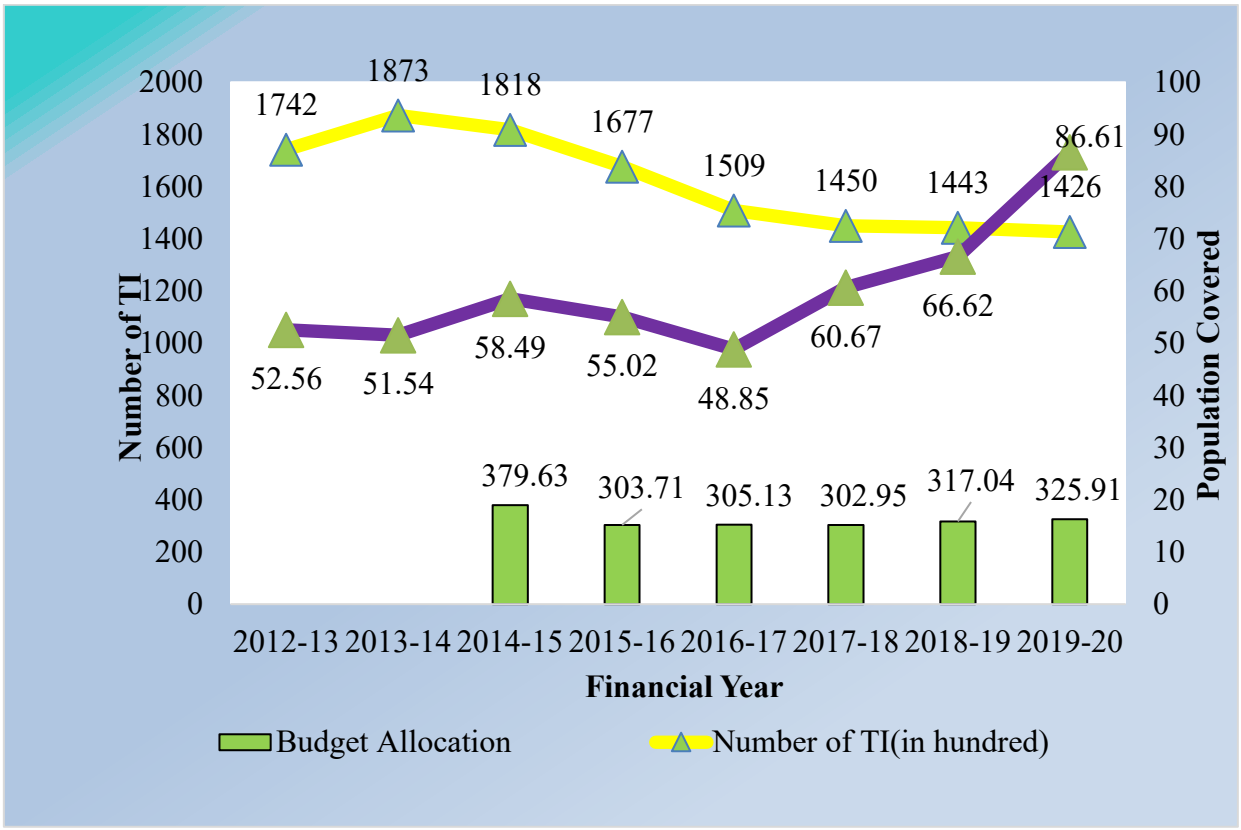


Figure 2.1 Year-wise TIs progress and budget allocation at National Level (Source: NACO)

Considering the year wise TIs progress and budget allocation for the last eight years (See figure 2.1), it can be observed that the number of TIs has been gradually decreasing over the years. But during the same time, the population covered by them has been increasing. Number of TIs in 2012-13 was one thousand eight hundred and six (1,806) which covered 52.56 lakh of the population whereas 86.61 lakh of the population has been covered by fourteen hundred and twenty-six (1,426) TIs. One of the reasons for decreasing number of TIs from one thousand eight hundred and eighteen (1,818) in 2014-15 to one thousand six hundred and seventy-seven (1,677) in 2015-16 may have been the unsatisfactory performance due to the decreased funds available to SACS and NACO. During the interaction with NACO officials, one of the concerns shared by them has been the setting up of an exclusive TI.

For a small set of population, setting up of an exclusive TI has been tough, in that case, the population from different typologies has been clubbed for optimal utilization of resources as well as to cover more population.

Mr. X, NACO TI Division official.

Thus, there have been only two possible types of HRG TIs:

1. TIs for an exclusive-core group –e. g. FSW only TI, or MSM only TI, TG TI or IDU only TI
2. Core composite TI for multiple core groups: e. g. TI for FSWs and MSM in each geographic area.

Table 2.1 represents represent the year-wise distribution of exclusive and core composite TIs.

Table 2.1 Year-wise distribution of exclusive and core composite, non-core (bridge population) TIs at National Level

	FSW	MSM	TG	IDU	Core Composite	Migrants	Truckers	Total
2012-13	515	184	21	277	407	251	87	1,806
2013-14	547	189	21	295	440	289	92	1,873
2014-15	498	158	33	271	455	307	96	1,818
2015-16	472	141	37	247	424	272	84	1,677
2016-17	396	121	32	224	441	218	77	1,509
2017-18	382	112	32	199	442	207	76	1,450
2018-19	345	108	36	193	497	200	64	1,443
2019-20	328	108	41	193	486	205	65	1,426

Source: NACO

Female Sex Worker

For NACP-IV and extension period, the estimated number of FSW is eight lakh fifteen thousand three hundred and fifteen (8,15,315), out of which the programme has been able to cover seven lakh seventy-five thousand seven hundred and sixty-three (7,75,763) of the population through three hundred twenty-eight (328) TIs in 2019-20 as shown in Table 2.2 (a). Over the years, HIV testing among FSW has been increased from sixty-seven (67) percent in 2013-14 to seventy-nine (79) percent in 2019-20 and HIV positivity has been reduced from 0.22 percent in 2013-14 to 0.11 percent in 2019-20 as shown in Table 2.2 (b). Similarly, STI detection in this group has also been decreased from 3.31 in 2013-14 to 1.89 in 2019-20 as shown in Table 2.2 (b), row iii. Condom demand generation has decreased in this group over the last eight (8) years as shown in Table 2.3.

Table 2.2 (a) Estimate and coverage in numbers of HRGs during NACP and extension period at the National Level

	Estimated No. of HRGs	Coverage of HRGs (in numbers)							
	2012-2020	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
FSW	815315	748190	718998	694576	693636	601531	634708	742256	775763
MSM	283828	288701	258660	246704	253733	208366	225038	259417	271884
TG	60517	14080	13200	19784	26627	28891	32774	43057	47434
IDU	160968	148334	131752	133087	134960	120595	130798	149591	165680
Migrants	5685478	2863216	2923854	3590126	3297748	2966101	3862682	4082102	5199071
Truckers	1318412	1194000	1108065	1165412	1095400	959675	1181136	1385616	2202054
Total	**8324518**	**5256521**	**5154529**	**5849689**	**5502104**	**4885159**	**6067136**	**6662039**	**8661886**

Source: NACO

Male who has sex with men (MSM)

Coverage of MSM has been decreased since 2012-13. From 2.88 lakhs in 2012-13, it has been reduced to 2.71 lakh in 2019-20 as shown in Table 2.2 (a). It was estimated that 2.8 lakhs of MSM will be reached during NACP-IV and extension period but except for the year 2012-13, coverage has not been reached as per the estimates. Like FSW, HIV testing has been increased over the years in this group as well. From sixty-five (65) percent in 2013-14, it has been escalated to eighty-two (82) percent in 2019-20 as shown in Table 2.2(b) row iv and the small decrease has also been

observed HIV positivity in this group too. From 0.30 percent in 2013-14, it has reduced to 0.28 percent in 2019-20 as shown in Table 2.2 (b) row v. STI detection has also been reduced from 2.1 percent in 2013-14 to 0.99 percent in 2019-20 as shown in Table 2.2(b) row vi. Condom demand generation has decreased in MSM over years as shown in Table 2.3.

Transgender/ Hijra

As per the data provided by NACO, it was estimated that sixty thousand (60,000) of TG/H will be reached during NACP-IV and extension period but only forty-seven (47) thousands of TG/H have been reached with the help of forty-one (41) TIs. Over the last 8 years, coverage has been increased though. Only fourteen thousand (14,000) of TG/H has been covered in the 2012-13 and the number got increased to forty-seven thousand (47,000) in 2019-20 as shown in Table 2.2 (a). The number of testing has been increased from forty-six (46) percent in 2013-14 to seventy-five (75) percent in 2019-20 as shown in Table 2.2 (b) row vii. The number of HIV positivity has been decreased during the same period. From 0.81 percent in 2013-14, it has reduced to 0.48 in 2019-20 as shown in Table 2.2 (b) row viii.

STI detection has also reduced from 2.36 percent to 1.58 percent in 2019-20 as shown in Table 2.2 (b) row ix. Since 2013-14, condom demand generation has increased in this group by eighty-nine (89) percent till 2018-19 and then reduced in 2019-20 as shown in Table 2.3. As depicted in Table 2.1, the number of TIs for this group has been increased from twenty-one (21) in 2012-13 to forty-one (41) in 2019-20. It seems like not much scale-up has been done over the last 8 years for this group and thus more efforts need to be done.

Injecting Drug Users

IDUs have the highest level of HIV prevalence i.e. as also depicted in Table 2.4, not only in the North-Eastern states but also in several other regions. NACP-IV and extension period estimated to cover 1.6 lakh and the estimates have been achieved in 2019-20. 1.48 lakh of IDUs have been covered in 2012-13 and the coverage increased to 1.65 in 2019-20 through 193 TIs as shown in Table 2.2 (a). HIV testing has been increased from sixty-two (62) percent in 2013-14 to seventy-two (72) percent in 2019-20 as shown in Table 2.2 (b) row x.

Unlike other groups, HIV positivity has been increased in this group over the years. It has reached to 1.11 percent in 2019-20 from 0.85 in 2013-14 as shown in Table 2.2 (b) row xi. Reaching out to new population could be a reason for this increase.

Table 2.2 (b) HIV testing & positivity and STI detection of HRGs during NACP and extension period at the National Level

Indicator	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
FSW HIV Testing (%)	67	69	69	70	79	73	79
FSW HIV Positivity (%)	0.22	0.16	0.11	0.11	0.14	0.13	0.11
FSW STI Detection (%)	3.31	2.62	2.05	1.93	3.29	2.06	1.89
MSM HIV Testing (%)	65	70	66	69	72	71	82
MSM HIV Positivity (%)	0.3	0.24	0.21	0.24	0.28	0.21	0.28
MSM STI Detection (%)	2.01	1.33	1.26	1.17	3.85	1.16	0.99
TG/H HIV Testing (%)	46	48	53	66	73	70	75
TG/H HIV Positivity (%)	0.81	0.95	0.61	3.63	0.63	0.59	0.48
TG/H STI Detection (%)	2.36	1.87	1.68	1.55	1.4	1.6	1.58
IDU HIV Testing (%)	62	66	69	73	68	66	72
IDU HIV Positivity (%)	0.85	0.74	0.65	0.78	1.03	1.12	1.11
IDU STI Detection (%)	2.63	1.54	0.74	0.57	1.08	3.5	0.31

Source: NACO

For IDUs, Opioid Substitution Therapy (OST) was integrated as part of the Harm Reduction service component in 2008. Forty-two (42) NGO, one hundred eighty-two (182) Collaborative Model, and fifty-one (51) Satellite centres have been currently covering approx. thirty-four thousand eight hundred and ninety-two (34,892) active IDUs. OST has also been provided in prison settings.

Migrants

Coverage of Migrants has increased since 2012-13. From 28 lakhs in 2012-13, it has been increased to 51 lakhs in 2019-20 as shown in Table 2.2 (e). It was estimated that 56 lakhs of Migrants will be reached during NACP-IV and extension period, but coverage has not been reached as per the estimates.

Table 2.2 (c) HIV testing & positivity and STI detection of bridge population during NACP and extension period at the National Level

Indicator	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Migrants HIV Testing (%) Target (30%)	12	15	16	16	22	27	27
Migrant HIV Positivity (%)	0.42	0.27	0.21	0.19	0.19	0.17	0.15
Migrant STI Detection (%)	6	6.5	5	4.2	3.8	3.5	3.6
Truckers HIV Testing (%) (Target 15%)	8	9	9	11	13	16	24
Truckers HIV Positivity (%)	0.59	0.42	0.30	0.27	0.22	0.19	0.15
Truckers STI Detection (%)	8.5	8	6.6	5.3	4.4	3.7	3.0

In migrants also, HIV testing has been increased over the years. From twelve (12) percent in 2013-14, it has been escalated to twenty-seven (27) percent in 2019-20 as shown in Table 2.2(c) row (i) and the small decrease has also been observed HIV positivity in this group. From 0.42 percent in 2013-14, it has reduced to 0.15 percent in 2019-20 as shown in Table 2.2 (c) row (ii). STI detection has also been reduced from 6 percent in 2013-14 to 3.6 percent in 2019-20 as shown in Table 2.2(c) row iii.

Truckers

NACP-IV and extension period estimated to cover 13 lakhs of truckers and the estimates have been achieved in 2018-19 and 2019-20. Eleven lakhs of truckers have been covered in 2012-13 and the coverage increased to twenty-two lakhs in 2019-20 as shown in Table 2.2 (a). HIV testing has been increased from eight (8) percent in 2013-14 to twenty-four (24) percent in 2019-20 as shown in Table 2.2 (c) row iv. HIV positivity has decreased in this group over the years. It has decreased to 0.15 percent in 2019-20 from 0.59 in 2013-14 as shown in Table 2.2 (c) row v. STI detection has also been reduced from 8.5 percent in 2013-14 to 3 percent in 2019-20 as shown in Table 2.2(c) row vi.

Table2.3 Condom demand and distribution during NACP-IV and extension period at the National Level

	FSW		MSM		TG		IDU		Total		
	Demand	Distribution	Demand	Distribution	Demand	Distribution	Demand	Distribution	Demand	Distribution	% of Distribution
2012-13		202346572		52080206		7963345				**262390123**	
2013-14	252303376	243801623	62056217	65434304	6198541	4907891	7043360	7270006	**327601494**	**321413824**	**98%**
2014-15	252111581	196253059	67375484	53634267	8493352	6353726	8426937	7724488	**336407354**	**263965540**	**78%**
2015-16	233690025	173450436	64071823	48774794	9403974	5881528	7989666	7267245	**315155488**	**235374003**	**75%**
2016-17	193629493	145674529	50562491	38640772	9998710	7456312	6396674	5905477	**260587368**	**197677090**	**76%**
2017-18	207616357	166786843	54874443	45908704	11399193	9372206	6542666	6135167	**280432659**	**228202920**	**81%**
2018-19	204770819	160403602	58094336	45755424	11702253	5666044	6303903	5666044	**280871311**	**217491114**	**77%**
2019-20	198479523	163100281	57804990	49258255	5493517	11249949	5493517	4990402	**267271547**	**228598887**	**86%**

Source: NACO

Table2.4 (b) Year-wise HIV Prevalence of different typologies

	2006			2007			2008-09			2010-11			2017		
	FSW	MSM	IDU	FSW	MSM	IDU	FSW	MSM	IDU	FSW	MSM	IDU	FSW	MSM	IDU
State															
Delhi	2.8	12.27	10	3.15	11.73	10.1	2.17	7.87	18.6	0.7	5.34	18.27	1.6	1.8	16.21
Karnataka	8.64	19.2	3.6	5.3	17.6	2	14.4	12.52	2	5.1	5.36	0	3.33	5.4	0.41
Maharashtra	19.57	15.6	20.4	17.91	11.8	24.4	10.77	11.9	20	6.89	9.91	14.17	3.48	4.69	
Manipur	11.6	10.4	19.8	13.07	16.4	17.9	10.87	17.21	28.65	2.8	10.53	12.89	1.4	8.4	7.66
Odissa	1	-	10.4	0.8	7.37	7.33	2.4	4.19	7.2	2.07	3.79	7.16	0.51	0.8	3.4
UP	1.52	-	4.63	0.78	0.4	1.29	1.03	4.07	2.46	0.62	1.56	2.03	0.22	1.14	4.53
INDIA	**4.9**	**6.41**	**6.92**	**5.06**	**7.41**	**7.23**	**4.94**	**7.3**	**9.19**	**2.67**	**4.43**	**7.14**	**1.56**	**2.69**	**6.26**

Source: HSS 2016-17

Since the HIV prevention, treatment and care programmes have been implemented in the Prison setting, a total of nine hundred seventy-one (971) have been covered out of one thousand three hundred sixty-three (1,363) prisons in 2019-20 as shown in Figure 2.2.

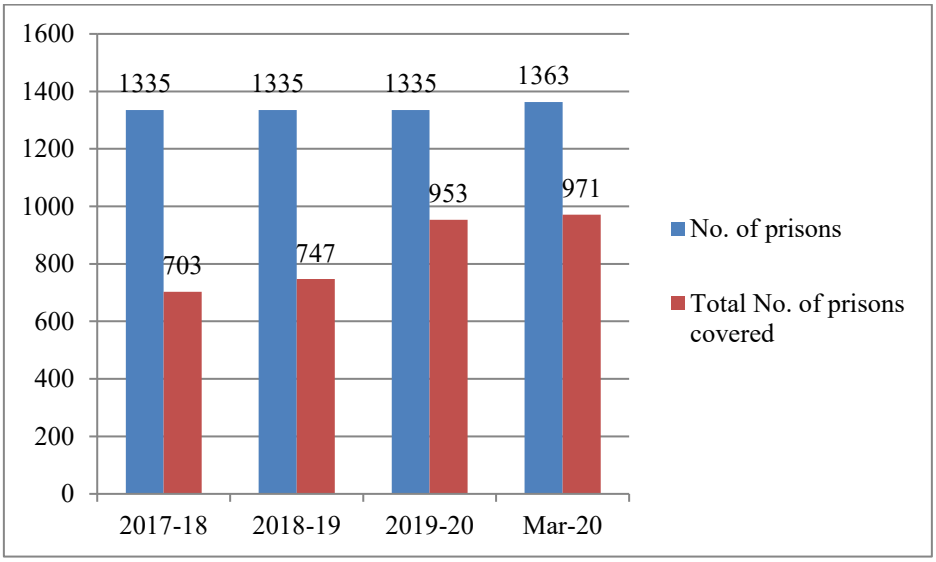


Figure2.2 Prison Intervention- Coverage Source: NACO

Table2.4 (a) Typology wise HIV Prevalence

Typology wise HIV Prevalence, HSS 2017			
State	**FSW**	**MSM**	**IDU**
Delhi	1.6	1.8	16.21
Karnataka	3.33	5.4	0.4
Maharashtra	3.47	4.69	
Manipur	1.4	8.4	7.66
Orissa	0.51	0.8	3.4
UP	0.22	1.14	4.53
India	**1.56**	**2.69**	**6.26**

Source: HSS 2016-17

One of the biggest achievements of this division has been the reducing prevalence over the years as shown in Table 2.4 (b). However, a high-level epidemic among IDU has been a major concern. As per the fifteen (15) rounds of HSS (2016-17), the prevalence among the FSW and MSM has continued to show declining trend at the national level, the higher prevalence among IDU and H/TG is the point of concern. In respect to the states under study, HIV prevalence among FSW and MSM in Karnataka and Maharashtra has been more than the national level, whereas high prevalence among IDU above national level has been observed in Delhi and Manipur as shown in Table 2.4 (a).

State-wise Target Vs Achievement

Delhi

The number of TIs has decreased in Delhi from one hundred and two (102) in 2012-13 to seventy-eight (78) in 2019-20 i.e. there has been 23.5 percent decrease in the number of TIs in the last 8 years. During NACP-IV and extension period, targets set for the number of TIs for different typologies have been achieved in some years. In 2014-15 and 2015-16, major variation in terms of target achieved has been observed as shown in Table 2.5.

Table2.5 Typology wise number of TIs in Delhi

Delhi	Target	FSW	MSM	TG	IDU	MIGRANT	TRUCKER	Total
2012-13	**102**	40	17	8	20	13	4	**102**
2013-14	**107**	40	17	8	21	17	4	**107**
2014-15	**107**	37	14	8	17	16	4	**96**
2015-16	**107**	36	12	8	15	13	4	**88**
2016-17	**82**	32	11	6	13	13	4	**82**
2017-18	**79**	32	11	6	13	13	4	**79**
2018-19	**79**	31	11	6	13	13	4	**78**
2019-20	**78**	31	11	6	13	13	4	**78**

The programme has been able to cover fifty-one (51) thousands of the FSW through seventy-eight (78) TIs in 2019-20. In every year during NACP-IV and extension period, the proposed TI target for FSW has been achieved except for the year 2015-16, where coverage is ninety-nine (99) percent. Similarly, for all typologies, proposed target as per Annual Action Plan (AAP) has been met in terms of HRGs coverage as shown in Table 2.6. In Delhi, condom demand has been more in FSW followed by MSM and TG. In all typologies, condoms have not been distributed has fully as per the demand as shown in Table 2.7. HIV positivity has been reducing in all the typologies over the years as displayed in Figure 2.3. In IDU, HIV positivity in 2012-13 was 2.80 percent, it got increased in 2014-15 and then further reduced to 0.90 percent in 2019-20.

Looking at the changing female sex pattern in Delhi from geographical to virtual network, various prevention interventions have been done like outreach by involving the network operators in the TI program for service delivery to these network-based population, phone-based outreach etc.

Some of the other prevention interventions taken up the state are peer navigation for ART linkages, index testing to test the sexual and social networks for the PLHAs, strengthening outreach approach, and capacity building of TI staff on revamped strategies, digital marketing on rolling out activities under virtual network and network mapping process and its implementation in the field.

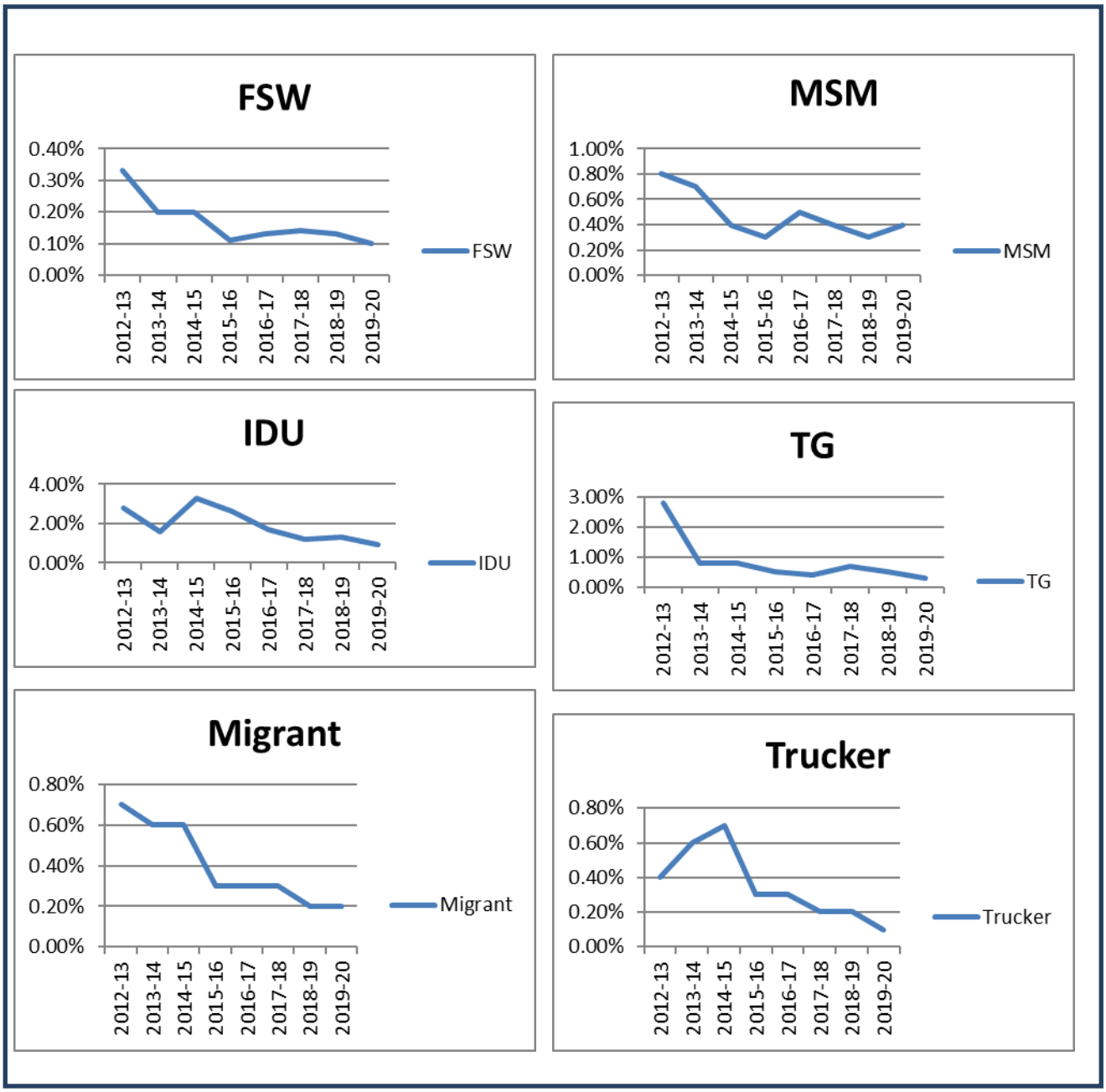


Figure 2.3 Year-wise HIV positivity in different typologies over the last 8 years in Delhi

Table2.6 Typology wise Target and coverage in the last 8 years in Delhi

	201-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		2019-20	
Typology	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**
FSW	40750	42051	44350	45787	41350	43147	40750	40231	36500	39650	36500	40647	44500	47315	44500	51248
MSM	15250	12916	16200	15946	14000	13169	12400	12825	11400	12673	11400	13090	13600	14928	13600	16348
TG	5200	3258	5200	6187	5650	6644	5650	6108	4450	5197	5100	5822	7300	7428	7300	8829
IDU	9900	11533	11300	12562	9800	10594	9000	9816	9400	10384	9000	10405	11400	12584	11400	13351
Migrant	60000	55000	225000	192717	220000	243611	180000	183164	195000	195207	195000	194190	260000	250464	260000	257874
Trucker	50000	61626	50000	55067	50000	47847	50000	57647	50000	58218	50000	57009	50000	55349	40000	43958

Table2.7 Typology wise Condom demand and distribution in Delhi

	2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		2019-20	
Typology	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**
FSW	17252680	15078701	22078376	14659695	19119939	12503154	17464913	8628223	22546442	15099549	24019508	21006668	22444232	15904280	24698788	16629628
MSM	3582789	2976952	4868225	3439766	4499396	3153577	3527357	1967805	5328832	3737372	5659292	5186728	6255376	4887232	7026896	6257976
TG	15556	8731	2275211	1571057	2266614	1549411	2143498	996313	2907008	2016296	3021384	2740616	3356344	2410256	4298868	3323016
IDU	304294	317991	357729	342673	292692	287817	242572	231533	314852	294072	284408	274196	282408	266096	268404	259832
Total	**21155319**	**18382375**	**29579541**	**20013191**	**26178641**	**17493959**	**23378340**	**11823874**	**31097134**	**21147289**	**32984592**	**29208208**	**32338360**	**23467864**	**36292956**	**26470452**

Table 2.8 Typology wise number of TIs in Karnataka

Karnataka	FSW	MSM	TG	IDU	CC	MIGRANT	TRUCKER	Total
2012-13	64	31	2	4	4	19	5	129
2013-14	66	31	2	4	4	21	7	135
2014-15	63	28	2	4	3	20	6	126
2015-16	63	27	2	4	3	18	6	123
2016-17	31	19	2	2	11	9	4	78
2017-18	32	18	2	2	11	8	3	76
2018-19	32	18	2	1	12	8	3	76
2019-20	32	18	2	1	11	8	4	76

Table 2.9 Typology wise target and their coverage during the last 8 years in Karnataka

Karnataka	2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		2019-20	
Typology	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**
FSW	84063	84215	86417	87115	81316	84051	77436	82770	76594	89702	68709	80102	70171	81426
MSM	26908	28708	27329	28205	25816	29751	27677	23743	27036	33768	19076	23573	18244	22223
TG	1200	1780	1796	1921	1796	2033	1922	2243	1922	2292	1922	2473	2154	2303
IDU	1597	1510	1903	1945	1949	2054	1896	1844	1896	1876	845	941	950	1171
Migrant	210000	220736	202000	182167	182000	178942	142000	90737	142000	146692	142000	148804	142000	147603
Trucker	80000	32932	80000	33061	80000	56443	85000	35197	87000	76954	87000	76341	80000	83859

Table 2.10 Typology wise Condom demand and distribution in Karnataka

Karnataka	2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		2019-20	
Typology	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**	**Demand**	**Distribution**
FSW	29644888	27124437	24951574	20171521	23843651	21306297	17744649	9879814	21497586	20094303	21050849	19980264	22001392	20425607
MSM	7953261	7110603	6669807	5465553	7097488	6537719	3454359	3185628	6682912	6322280	6876779	6631304	6829624	6307462
TG	742400	502020	1383075	935360	1292971	1176159	1313329	1081390	1296487	1220186	1128396	1129753	1117569	997058
IDU	30545	25848	54975	61359	50614	64016	61412	36579	66792	51210	24277	21781	28942	28157
Total	**38371094**	**34762908**	**33059431**	**26633793**	**32284724**	**29084191**	**22573749**	**14183411**	**29543777**	**27687979**	**29080301**	**27763102**	**29977527**	**27758284**

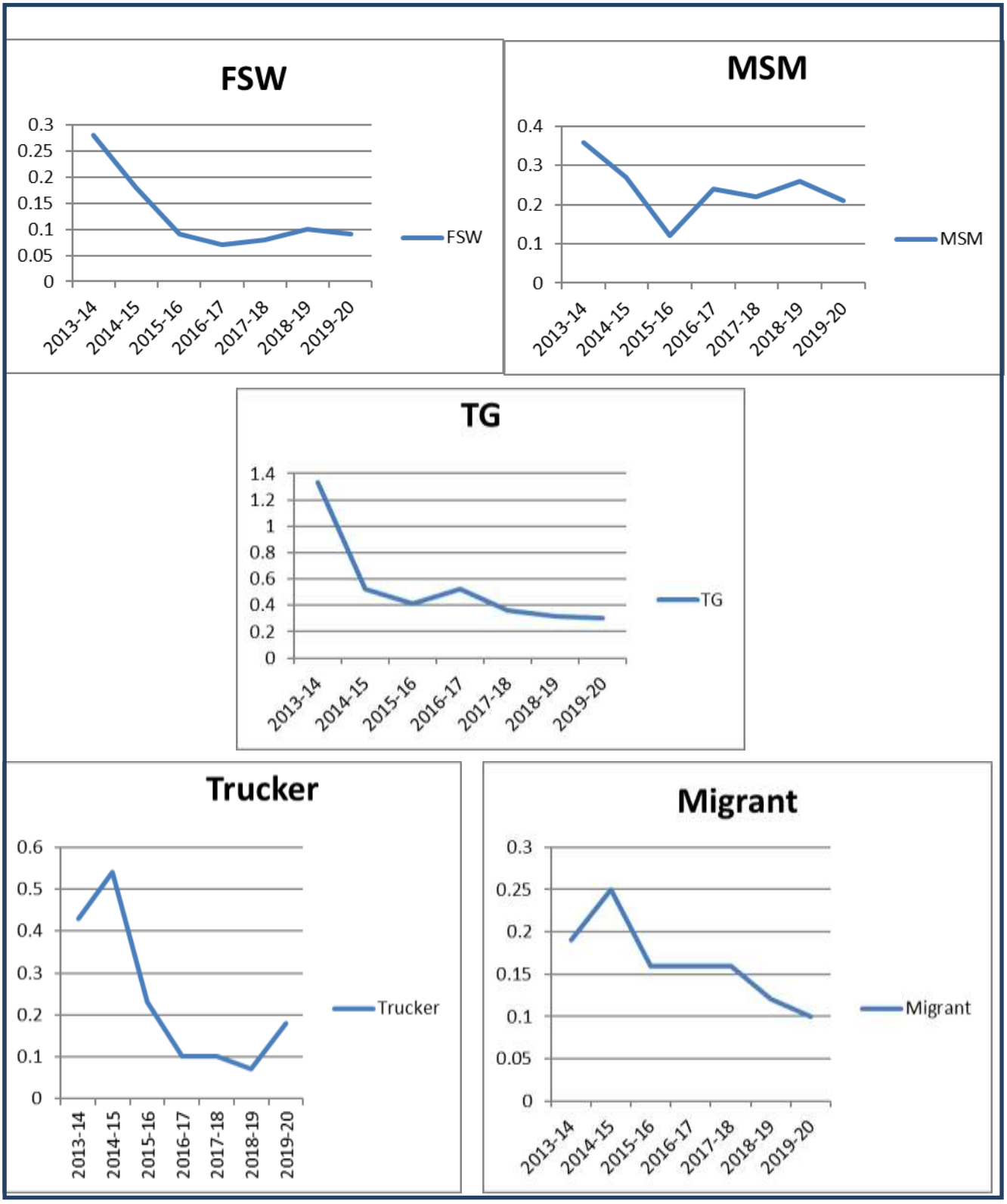


Figure2.4 Year-wise HIV positivity in different Typologies over the last 8 years in Karnataka

Karnataka

Table 2.8 depicts typology wise number of facilities over the last 8 years. The number of total TIs has been reduced from one hundred twenty-nine (129) in 2012-13 to seventy-six (76) in 2019-20 i.e. forty-one (41) percent of reduction has been observed. In all the typologies, the state has been able to cover the population against the target in 2019-20. It has been observed that the number of FSW population covered in last 8 years has been reduced from eighty-four (84) thousand in 2013-14 to eighty-one (81) thousand in 2019-20 i.e. almost four (4) percent reduction whereas there has been an increase of thirty-nine (39) percent in coverage of TG population i.e. from one thousand seven hundred eighty (1,780) in 2013-14 to two thousand four hundred and seventy-four (2,474) in 2018-19 as shown in Table 2.9. HIV positivity has been reduced in the last 8 years in all the typologies as displayed in Figure 2.4.

In has been observed that the condom demand overall has been more in FSW followed by MSM, whereas IDUs has the least condom demand in the last 8 years. Though, condom demand and distribution has been reduced with increasing years in all typologies as shown in Table 2.10.

Karnataka state has devised ways to cover more HRGs in the non-TI districts. The Extended TI services to the uncovered HRG population has been planned during the FY 2016-17 in four districts of Bangalore Rural, Hassan (MSM/TG and FSW), Udupi (FSW and MSM) and Ramanagar (FSW) to provide the HIV prevention services to the HRGs in the non-TI districts where the TIs closed after Evaluation. It has been planned to add the uncovered population of one district to the TI, which is functional in the nearby district. The population was added to the existing TI's contracted population under the single agreement as a single TI. CBOs have been selected on priority for this initiative, hence that community would receive the assistance for the service delivery as soon as possible. Thus, the complete extended service process has been made as part of ensuring the total coverage of high-risk population as far as possible with CBO involvement, community consultations and within the approved budget.

Maharashtra

Overall, the number of TIs has been reduced from one hundred seventy-seven (177) in 2014-15 to one hundred thirty-three (133) in 2019-20 i.e., twenty-five (25) percent reduction has been observed. In almost all typologies, gradual reduction in the number of TIs has been observed from 2014-15 to 2019-20 as shown in Table 2.11. Even with reduced TIs, MSACS has managed to cover the contracted population with the existing TIs. In 2016-17, the state has not been able to cover the contracted population for all typologies as shown in Table 2.12. HIV testing has been gradually increasing from 2013-14 to 2019-20 in all typologies, but the HIV testing target has not been met in the last 8 years in all typologies as shown in Table 2.13. HIV positivity has been steadily decreasing in all typologies over the last 8 years as displayed in Figure 2.5.

Condom distribution has been increased from eighty-five (85) percent in 2013-14 to ninety-eight (98) percent in 2019-20 for the FSW. Similarly, in TGs condom distribution has been increased from eighty-four (84) percent in 2013-14 to ninety-five (95) percent in 2019-20 whereas in IDUs condom distribution has been decreased from eighty-one (81) percent in 2013-14 to sixty-three (63) percent in 2019-20 as shown in Table 2.14.

Table2.11 Typology wise number of TIs over the last 8 years in Maharashtra

Year	FSW	MSM	TG	IDU	CC	MIGRANT	TRUCKER	Total
2012-13	52	18	0	3	2	49	10	134
2013-14	61	22	0	3	11	60	12	169
2014-15	54	8	0	3	32	66	14	177
2015-16	54	8	5	3	29	65	13	177
2016-17	47	10	5	1	29	46	11	149
2017-18	45	9	5	0	26	39	11	135
2018-19	44	8	5	1	25	42	9	134
2019-20	40	7	5	1	27	42	11	133

Table2.12 Year wise coverage for different typologies in Maharashtra

	FSW		MSM		TG		IDU	
Year	Contracted Pop.	Coverage	Contracted Pop.	Coverage	Contracted Pop.	Coverage	Contracted Pop.	Coverage
2013-14	69425	69843	21885	20571	**0**	**0**	800	974
2014-15	67810	63699	23110	20681	1790	1360	800	825
2015-16	65845	64721	21875	22310	3990	2763	700	716
2016-17	71295	60543	24525	20517	3940	3680	1000	336
2017-18	60995	59858	20855	21247	3210	3546	500	280
2018-19	58895	57652	19905	20499	3055	3751	500	394
2019-20	57995	57182	18755	19922	3205	4058	500	516

Table2.13 Typology wise HIV testing Target and achievement in Maharashtra

	FSW		MSM		TG		IDU		Migrant		Trucker	
Year	Target	HIV Testing	Target	HIV Testing	Target	HIV Testing	Target	HIV Testing	Target	HIV Testing	Target	HIV Testing
2013-14	139685	89225	41142	28241	0	0	1948	686	220500	102338	43007	15397
2014-15	127399	104523	41362	32471	2721	1882	1649	762	273600	157893	39805	16750
2015-16	129443	101951	44620	33022	5526	2766	1432	782	268200	164725	40804	23378
2016-17	121087	101974	41034	31295	7361	4322	671	308	274200	163167	35521	26343
2017-18	119716	99957	42493	32812	7093	5565	560	490	207000	169077	32645	32056
2018-19	115304	100607	40997	34827	7502	6497	789	362	200400	170928	31502	23488
2019-20	115428	108806	41320	37123	8419	7172	1072	990	196500	222353	31740	49259

Table2.14 Year wise condom demand and distribution in different typologies in Maharashtra

	FSW			MSM			TG			IDU		
Year	Demand	Distribution	%	Demand	Distribution	%	Demand	Distribution	%	Demand	Distribution	%
2013-14	35167624	29855083	85%	5706079	5766509	100%	0	0	0%	10628	8633	81%
2014-15	33508009	25396417	76%	5573731	4767014	86%	543654	459040	84%	6877	6259	91%
2015-16	29752627	18669229	63%	5429965	3703281	68%	1169218	820116	70%	6192	5846	94%
2016-17	26534856	20647350	78%	5080711	4079630	80%	1726322	1188172	69%	4358	4381	100%
2017-18	26015210	18442861	71%	5478153	4249326	78%	1751326	1313057	75%	6358	5329	84%
2018-19	25819419	22414383	87%	5692767	4620805	81%	1762260	1611910	91%	10366	9751	94%
2019-20	25509318	25109235	98%	5380632	5451679	100%	2288419	2273924	95%	15668	9809	63%

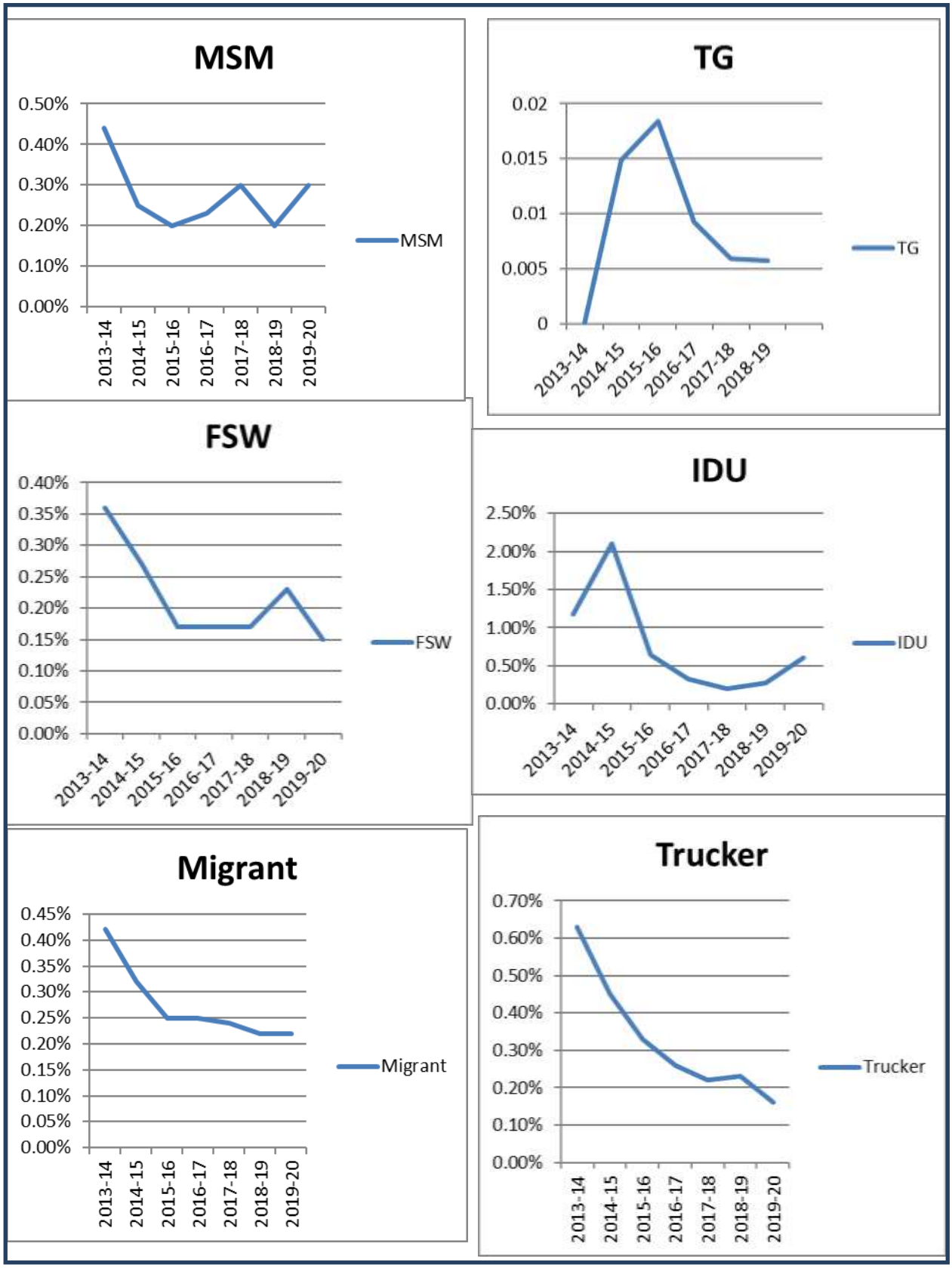
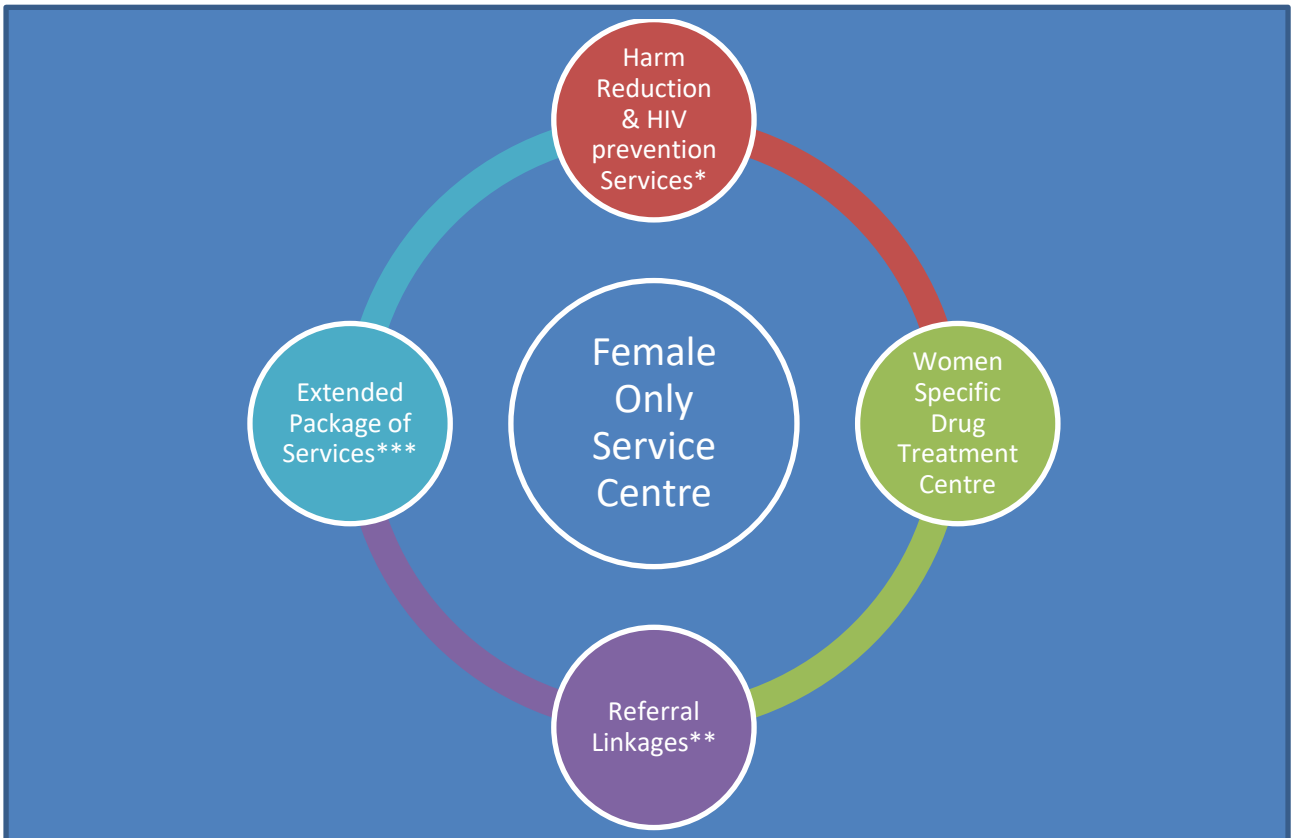


Figure2.5 Year-wise HIV positivity in different typologies in Maharashtra

Some of the best practices of the TI division in the state of Maharashtra have been the use of What's App broadcast group for creating awareness in FSW about personal hygiene, general health and HI/STI/ condom awareness to unreached / not in contact to the HRGs in Pune District, Maharashtra. In Pune, TI NGOs have created thirty (30) broadcast groups site wise and outreach worker wise. Currently, there is one thousand six hundred and twenty-three (1,623) HRGs part of these groups and TI is doing HIV awareness using modern technology and social media. Also, they are doing hotspot and services mapping using Google maps. This activity has been undertaken to access health services to key population/hotspot area. By using the Latitude (Represents North-south Location) and longitude (Represents East-West Location) parameters, TI NGOs staff and MSACS officers can have access to the information of the exact location of Hotspots and Services in terms of micro-planning, TI services, a load of KPs and documentation. This map can become a guide to new staff about locations of key population/hotspot areas/health services. This is both a time and money-saving activity. Also, to understand the sexual behaviour patterns of female sex worker, polling booth survey, an innovative rapid assessment tool, has been used by the state. Finally, the Nutritional Support and PLHIV Support group meeting has been conducted for improving the quality of life amongst the FSWs living with HIV. Due to this, a total of one hundred and twenty-five (125) FSW PLHIV received nutritional support and attending a support group meeting every month. The outreach team has been continuously following -up, closely monitoring the ART adherence and given Psychosocial support and hence till Jan 2020 total one hundred and sixteen (116) (92%) individual PLHIV done the viral load test, out of that one hundred and eight (108) (93%) was virally suppressed, which is indeed a significant outcome.

Manipur

As mentioned earlier, HIV prevalence in IDUs has been more, as compared to other states under study. But it has been reducing with increasing years as shown above in Table 2.4 (b). Table 2.15 provides a snapshot of the number of TI facilities over years for different typologies. In Manipur, there are four Female Injecting Drug Users (FIDU) intervention running under composite mode as positivity is increasing female groups in the state. In these FIDU interventions special trainings has been conducted at the state level on special needs including sexual and reproductive health, gender, mental health and linkages to social protection schemes etc.



FIDU Intervention Model Package Components

* Abscess management, STI management, NSEP, Overdose Management, OST, Condom promotion, HIV Counselling, ICTC, CD4 testing, ART.

** Health care providers, Police, Legal support services, Social services (Labour, Women's Departments, Child Welfare Department), Institutional settings (prison, correctional homes, destitute homes), Community gatekeepers (community leaders, peer support networks, pressure groups.

*** SRH, ANC, TB, PPTCT, drug rehabilitation, Care and support, vocational training, legal counselling & services, Community mobilization, health, hygiene, Free essential medicines, Night shelter, Short stay facility, Nutrition, Mental health counselling, Childcare, Crisis management, Education on safer practices, Female outreach.

Currently, total one hundred and seven (107) facilities are in place including fifty-four (54) TIs, nine (9) link worker scheme NGOs, seventeen (17) OST centres in the government hospital, sixteen (16) satellites OST centre, and 7 OST centre in NGO setting. During NACP-IV and extension period, coverage of HRGs population has been achieved as per the target for all typologies as shown in Table 2.16. Strengthening outreach approach through social media has been the cost-effective model to reach out the unreached HRGs in this state. Over the years, HIV positivity has decreased among FSW,

MSM, and in IDUs, however, in migrant workers, it has been increasing from 3.6 in 2012-13 to 12.1 in 2018-19 as displayed in Figure 2.6.

Table2.15 Typology wise number of TIs in Manipur

	FSW	MSM	TG	IDU	CC	MIGRANT	Total
2012-13	6	4	0	47	1	2	60
2013-14	6	4	0	55	7	2	74
2014-15	6	2	0	46	7	2	63
2015-16	6	2	0	46	7	2	63
2016-17	6	2	0	46	7	2	63
2017-18	2	1	0	37	12	2	54
2018-19	2	1	0	37	12	2	54
2019-20	2	0	0	37	13	2	54

Table2.16 Year wise target and coverage of HRGs in Manipur

	FSW		MSM		IDU	
Year	**Target**	**Coverage**	**Target**	**Coverage**	**Target**	**Coverage**
2013-14	5200	6064	1450	1449	18900	20875
2014-15	5200	5813	800	902	17100	19602
2015-16	5200	5775	800	946	17100	19252
2016-17	5200	5738	800	846	17100	18873
2017-18	5200	5509	1050	1237	16200	18192
2018-19	5100	5587	1050	1429	16050	19252
2019-20	5150	6292	1200	1577	17950	20516

Uttar Pradesh

Overall, the number of TIs has been reduced by thirty (31) percent in the NACP-IV period. It was hundred (100) in numbers in 2012-13 and got reduced to sixty-nine (69) in 2019-20 as shown in Table 2.17. The number of HRG coverage target has been achieved in the last 8 years for the typologies shown in Table 2.18. HIV testing has been reduced for FSW, MSM and truckers from 2012-13 to 2019-20 whereas it has increased in IDUs and migrants from eleven thousand one hundred and three (11,103) and six thousand one hundred and twenty-two (6,122) in 2014-15 to twelve thousand three hundred and ninety-nine (12,399) and ten thousand five hundred and forty-three (10,543) in 2019-20 respectively. HIV positivity has been decreasing in all typologies over the last 8 years as shown in Table 19. For the migrant population, health camps have been organized annually by the UPSACS. Table 2.20 depicts the condom demand and distribution in the state over the last 8 years. It has been observed that condom demand has decreased over the years whereas the condom distribution has increased from eighty (80) percent in 2012-13 to ninety-four (94) percent in 2019-20.

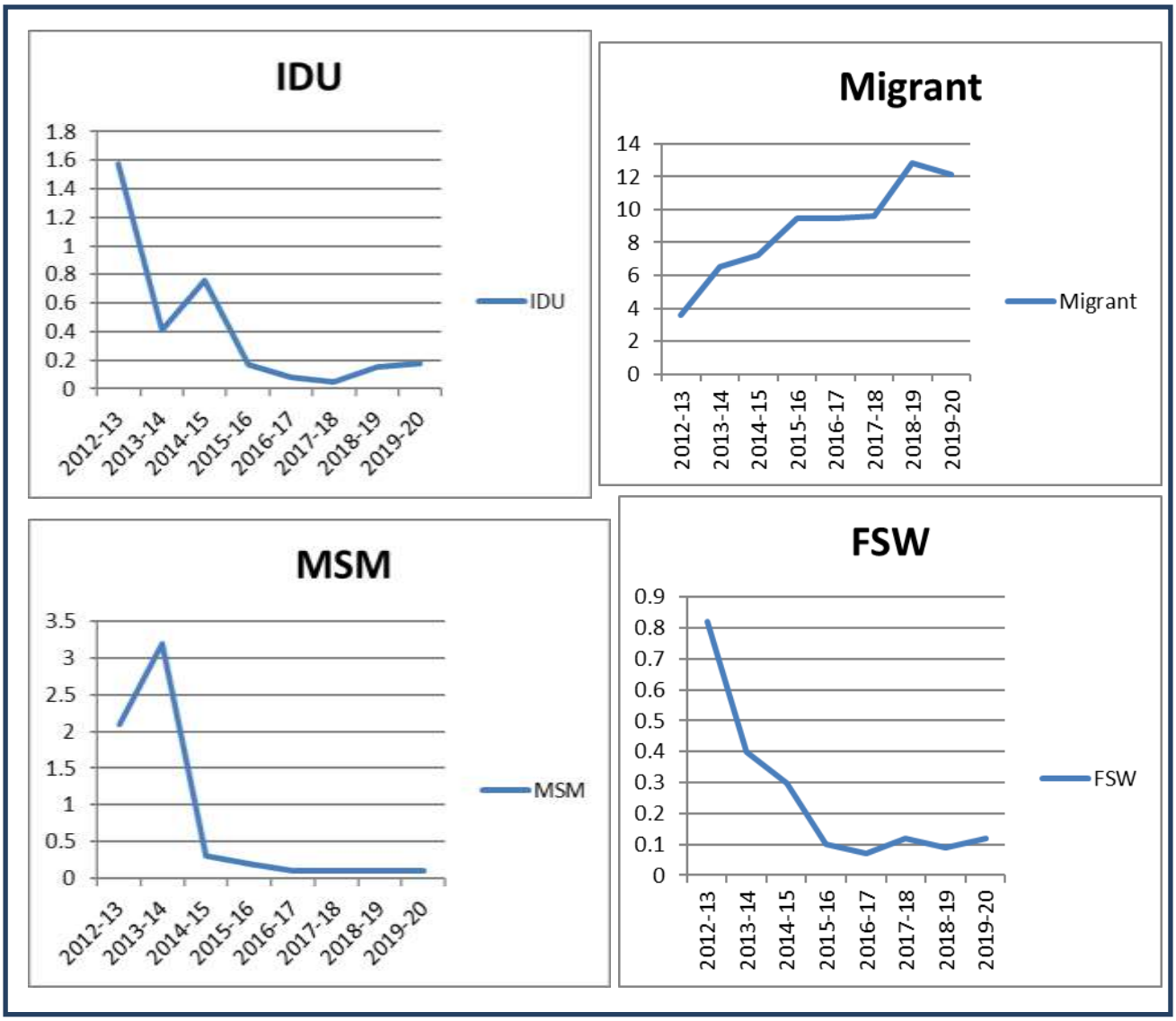


Figure2.6 Year-wise HIV positivity in different typologies over the last 8 years in Manipur

Table2.17 Typology wise number of TIs in Uttar Pradesh

UP	FSW	MSM	TG	IDU	CC/Transit	MIGRANT	TRUCKER	Total
2012-13	11	5	0	12	52/12	0	8	100
2013-14	12	5	2	13	54	0	5	91
2014-15	12	3	2	13	51	6	8	95
2015-16	12	3	2	13	48	4	6	88
2016-17	12	3	2	13	48	4	6	88
2017-18	11	2	2	10	49	4	6	84
2018-19	3	0	2	8	57	6	5	81
2019-20	3	1	4	8	43	6	4	69

Table2.18 Year wise target and coverage of HRGs in Uttar Pradesh

UP	2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		2019-20	
Typology	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage
FSW	19000	19278	18550	18907	18550	18721	19250	20027	19250	20304	18650	20506	19000	21103	13350	17260
MSM	7800	8410	7800	9010	7800	9910	7800	7738	7700	7956	7600	8031	6000	6420	5550	6852
TG							3100	2450	3100	2587	2800	2606	2550	2677	2700	3450
IDU	12600	13694	13500	14912	12600	12859	12600	13186	12550	14259	12450	13057	12900	14577	12250	16163

Table2.19 Typology wise HIV testing and positivity over the last 8 years

	FSW				MSM		TG			IDU			Migrant			Trucker		
Year	HIV Testing	Positive detective	HIV positivity	HIV Testing	Positive detective	HIV positivity	HIV Testing	Positive detective	HIV positivity	HIV Testing	Positive detective	HIV positivity	HIV Testing	Positive detective	HIV positivity	HIV Testing	Positive detective	HIV positivity
2012-13	17278	61	0.35	6821	58	0.85												
2013-14	18140	24	0.13	7204	54	0.75				10085	235	2.33				4649	10	0.61
2014-15	18980	50	0.26	8863	27	0.3				11103	143	1.29	6122	15	0.25	5011	13	0.26
2015-16	17339	31	0.18	5740	27	0.47	1737	22	1.27	10808	121	1.12	6469	15	0.23	4621	9	0.19
2016-17	18391	32	0.17	6826	30	0.44	2077	12	0.58	11159	249	2.23	7050	24	0.34	4072	19	0.47
2017-18	17875	20	0.11	6506	24	0.37	2140	9	0.42	10709	125	1.17	7928	12	0.15	4110	14	0.34
2018-19	17875	36	0.2	5606	26	0.46	2130	31	1.46	13709	197	1.44	6359	14	0.22	3354	13	0.39
2019-20	15562	18	0.12	5847	35	0.6	2955	17	0.58	12399	203	1.64	10543	14	0.13	3850	20	0.52

Table2.20 Year wise condom demand and distribution

	Condom Demand	Condom Distribution	% of Distribution
2012-13	10681690	8545352	80%
2013-14	10049375	8240487	82%
2014-15	9785802	7828642	80%
2015-16	10681231	9349254	88%
2016-17	10551841	8878027	84%
2017-18	10545482	9044839	86%
2018-19	9722273	8747141	90%
2019-20	9088102	8542816	94%

Innovations of TI Division

In the NACP-IV and extension period, various innovations have taken place like the rolling out of LWS guidelines in 2012. With the help of various development partners, the link worker scheme was operational in one hundred and thirty-nine (139) districts by December 2012 and reaches out to rural HRGs and their partners and vulnerable groups. In 2013-14, Employer-Led Model of intervention and piloting of Migrant Service Delivery System has been done. The employer-Led model has been implemented in occupation sectors with large clusters of informal workers and migrants. For the NACP-IV entire period, 301 industries had been identified for the implementation of this model. One hundred and twenty-two (122) districts had been identified with high-out migration (based on census 2001) across eleven (11) states of India for initiating community level migrant interventions to enhance tracking among migrants. In 2014-15, The National Consultative Workshop has been conducted with Enforcement agencies to rollout prison HIV intervention. Differentiated prevention model for IDU and satellite OST has been rolled out in 2017. In 2018, community-based screening has been introduced and guidance document on TB/HIV linkages for TI and LWS whereas in 2019, TI revamped strategy and TI evaluation manual and tool have been introduced.

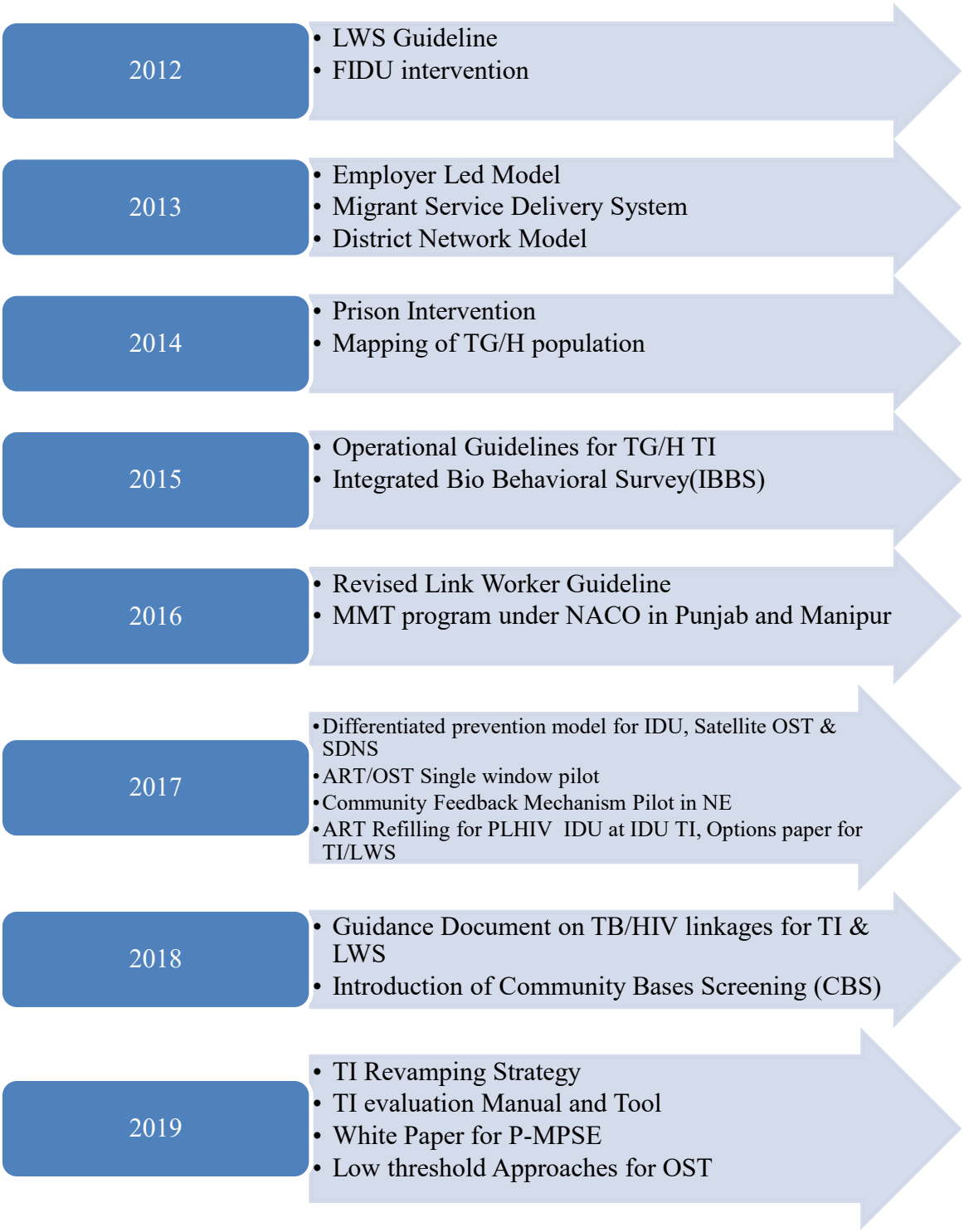


Figure2.7: Year Wise Major Programmatic Innovations Source: NACO

Some of the other innovations done by TI division during NACP-IV and extension period are as follow-

(i) Setting up of migrant health camps for the returnee migrants during the festive seasons

like HOLI/Diwali etc, in migrant prone districts.

(ii) Community Scorecard approach has been developed to increase the engagement of the community in improving HIV service delivery. The standard operating procedure (SOP) for implementing the community scorecard has been developed.

(iii) The community-based screening for partners/spouses of HRGs on priority basis in hard to reach and other vulnerable settings including slum areas.

(iv) Peer-based monitoring system at the community level which helps peer educator to assess the gap in receiving various services entitled for HRGs in his/her hotspot.

Role of National Technical Support Unit and State Technical Support Units

The national TSU (NTSU) was established under NACP III to serve as an in-house NACO capacity powerhouse to improve the technical quality of activities. NTSU provided support to 17 state-level TSUs in implementing operational guidelines. During the implementation of NACP IV (a) the roles of state-level TSUs were revised to include technical support to all program components, and (b) funding of state-level TSUs was transferred from development partners to NACO. As a result, this project resumed the financing of 17 state-level TSUs under Component 3. These TSUs served an important quality assurance role, thereby addressing the quality of healthcare service delivery, one of the challenges in India's health sector: *"in the health [sector] the key, the systemic problem is not whether people can access healthcare providers, but whether that access is of sufficient quality to be of any value to their health status.*"

In-depth interviews with TIs highlighted the important roles of TSUs in providing necessary support supervision to CBOs and local NGOs and in ensuring the quality of the TI implementation and the M&E data. TSU provided hands-on training to staff of CBOs and NGOs from fund management to use of data to inform program planning and course correction as well as technical know-how of TI activities, including outreach activities to HIV testing, and linkages to care and treatment. Along with technical support to TIs, TSUs also strengthened the capacity of respective SACSs to ensure the program quality and sustainability.

However, when external financing for the NTSU ceased, NACO restructured it with a proposal of having 9 NTSU national consultants to provide holistic technical support. The restructured NTSU was to be financed through the World Bank but this did not materialize. NACO tried to fund NTSU

using domestic sources but it was not successful. Therefore, the NTSU became defunct, although the state-level TSUs continued their work.

Suggestions from PLHIV/HRGs

During the field visit to DSACS Baba Ambedkar hospitals and Ghaziabad MMG hospital, under UPSACS various suggestions have been provided by the beneficiaries i.e. PLHIV and HRGs which are listed below-

- Nutritional support should be given maybe the eggs or protein powder which can be dissolved in water/Milk.
- More Services including free medicine should be provided at Clinics of TIs other than STI and testing services.
- Incentives such as bus or metro pass should be provided for availing treatment to PLHIVs/HRGs.
- Provision of IDs for all IDUs and other HRGs.
- Patient other treatment like Hepatitis-C should be taken care of at the Centre itself.
- Doctors/hospital staff's attitude towards TGs and PLHIV should be cordial.
- Patients who stay far from the health facilities, telemedicine can be done for STIs.
- Employment or skill which are suitable to their social status should be provided.
- Supply of condoms at the NGOs should be adequate.

- Better Quality of condom should be made available (presently the quality is not up to the mark).
- Supply of lubricants should be increased.

Issues and Challenges

- Over the NCAP-IV there has been an increasing workload on the TI in terms of numbers and geographical coverage and comparison, there has been a reduction in the budget allocated for the TI program which affects the process as well as delivery of quality sensitive services to the High-Risk behaviour key population.
- One of the major challenge and gap in the TI program has been the use of old mapping data which most of the times dates back to 2009 (in NCAP-III), and this creates challenges to realistically assess the reach, coverage and effectiveness of the interventions, no real-time updating of mapping of Target populations which is crucial for "targeted" nature of the program
- Another big evolving but having significantly changing business behavior of the commercial sex workers both female and male have given incredibly special challenges to the very definition and response mechanism and structure, affecting reaching out consistently as a well online connection becomes a challenge for the Program, ORW and NGOs, shifting and movement of the CSWs also causes newer challenges to enumerate, track and provide counselling services to them.
- TI population under different subcategories require specialized sensitive, appropriate IEC and engagement materials that need to be developed and updated periodically as well be relevant to the context, language, although there have been efforts in this direction the material development, up-dation and adoption in local context and languages have been reported to be slow as well challenging in terms of limited new IEC material distributed, visible and accessible.
- Closure of NTSU and STRC hampers the training process to the TIs which is a big gap and challenge, this not only creates a challenge in support and supervision as well as updating and tracking along with documenting the best practices in training curriculum and capacity building down the line.
- There have some significant challenges and issues regarding the delayed payment release to

TI NGO partners which sometimes causes disruptions and discontinuities in staff and services which results in the program getting affected in gaining from the relationship and goodwill created and generated by the TSU/TI program staff and ORWs.

- TI Costing guidelines, estimation processes as well strategies to consolidate differentiated services and program delivery have been developed but percolating it down to the field and getting them to understanding adopting and implementing takes time as well required hand-holding which sometimes has been a concern and challenges.
- Engagement, costing and review of TSUs has been streamlined but there has been a challenge in the relationship with SACS and monitoring and evaluation of their delivery and quality along with evaluation and renewal has been a challenge at times which needs to be looked into.
- TI Counseling and referral services and tracking mechanism also poses some issues and challenges which is a critical component of the program in terms of training, refreshers and costing which needs attention.

Chapter 3 Basic Services Division

The basic service division focuses on providing HIV counselling and testing services for HIV infection. The main goal is to identify as many people with HIV, as early as possible and counsel them for further care and treatment services. The HIV counselling and testing (HCT) services include the following components:

1. Integrated Counselling and Testing Centres (ICTC).
2. Prevention of parent-to-child transmission of HIV (PPTCT)
3. HIV/tuberculosis collaborative activities.

Integrated Counselling and Testing Centres (ICTC)

To enhance the access to HCT, diverse models are available in the district, sub-district and at the community level, to increase access to HIV diagnosis, including testing services through standalone ICTC located in medical colleges, district hospitals, sub-districts, CHC etc, facility-integrated counselling and testing centres (FICTC), set up below the block level at 24X7 PHC, etc and through Public-private partnership (PPP) ICTCs, which have been established in private facilities.

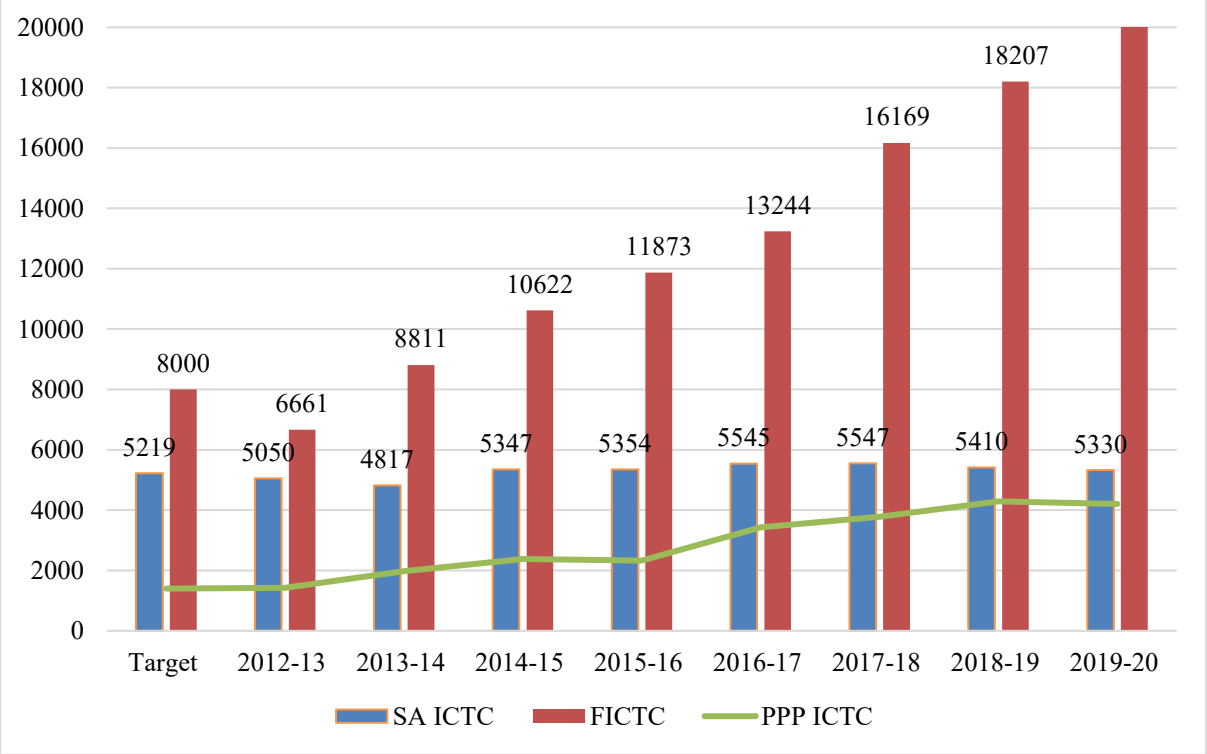


Figure 3.1 Number of ICTC facilities- Target Vs Achievement at National Level

At present, NACP-IV targets concerning the existence of ICTC facilities that have been achieved as exhibited in Figure 3.1. The number of stand-alone (SA ICTC) has increased by 5.5 percent only in the last 8 years. From five thousand and fifty (5,050) in 2012-13 the number got increased to five thousand three hundred and thirty (5,330) in 2019-2020. The number of community-based screening is two thousand forty-four (2044) in 2018-19 and two thousand four hundred ninety-four (2494) in 2019-20. The number of facility-level ICTC (F ICTC) was six thousand six hundred and sixty-one (6,661) in 2012-13, it almost increased by 3 folds in 2019-20 to twenty-one thousand one hundred and eighty-eight (21,188).

"We *counsel every patient who visits our clinic... but still, we are not able to do proper counselling due to the increased workload and a smaller number of counsellors. Also, there has been no appreciation or recognition system from the state in place. We sometimes feel so demotivated..."*

XYZ Counsellor, MMG Hospital, Baba Ambedkar Hospital

"Yes, we have faced difficulty in COVID time, our salary has been cut in this pandemic due to the leaves taken by us because of sickness or other issues, though the number of patients has reduced in the COVID time....."

ABC Counsellor, Baba Ambedkar Hospital, DSACS

".... In our ICTC area, wall painting is the biggest success...due to this, we got many HIV positive patients and MSM for further treatment. .....One patient who was not willing to reach ICTC and ART treatment also came to our clinic and linked to ARTC due to awareness he got from the wall painting..."

XYZ Counsellor, Nashik, Maharashtra

General Individual HIV Testing and Achievement

Across the country, ten (10) million general individuals have been tested for HIV against the target of fourteen (14) million in 2012-13, and the testing number got increased to almost 3 folds in 2019-20 i.e. twenty-eight (28) million against the target of twenty-three (23) million as displayed in Figure 3.2. Although the target was achieved in some states in some years, it is not true for all the states, as displayed in Figure 3.3. In the Karnataka and Maharashtra, targets have been achieved in almost

all years in the last 8 years except for the year 2012-13 where HIV testing target has not achieved. Similarly, in Manipur targets have been achieved in almost all years of NACP-IV except for the one year i.e. 2013-14. In Orissa, HIV testing target has been achieved only in three years i.e., in FY 2016-17, 2018-19 and 2019-20 whereas in UP achievements have not been as per the target only in three years.

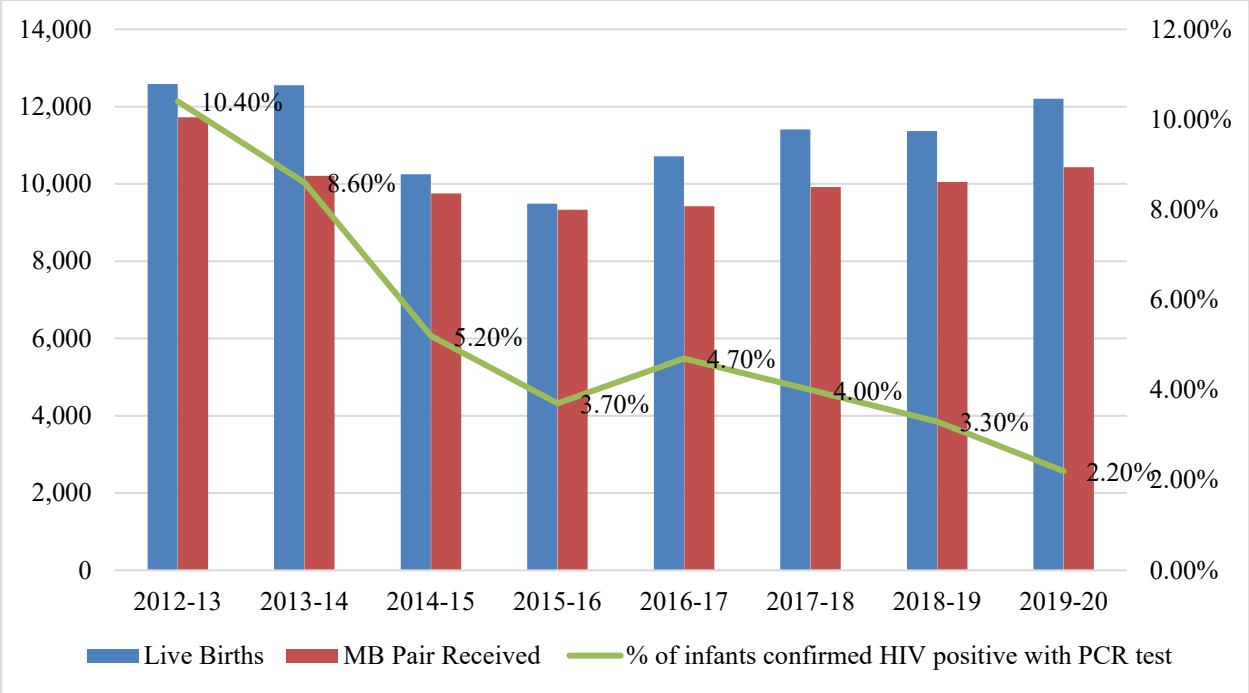


Figure3.2 Year wise General Individual HIV testing target and achievement under NACP IV and extension period at the National level

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

The major goal of this component is to eliminate new paediatric HIV infections and to improve maternal, newborn and child health and survival in the context of HIV. Various services have been provided under this PPTCT programme like (i) provision of care for STI/RTI, TB and opportunistic infections, (ii) routinely HIV counselling and testing with 'opt-out' option, (iii) ART treatment to HIV positive and lactating mothers, (iv) the involvement of spouse and family members, (v) the provision of nutritional counselling and psychological support to the positive pregnant mothers and future family planning advises, and (vi) antiretroviral prophylaxis to infants up to minimum six weeks related services etc.

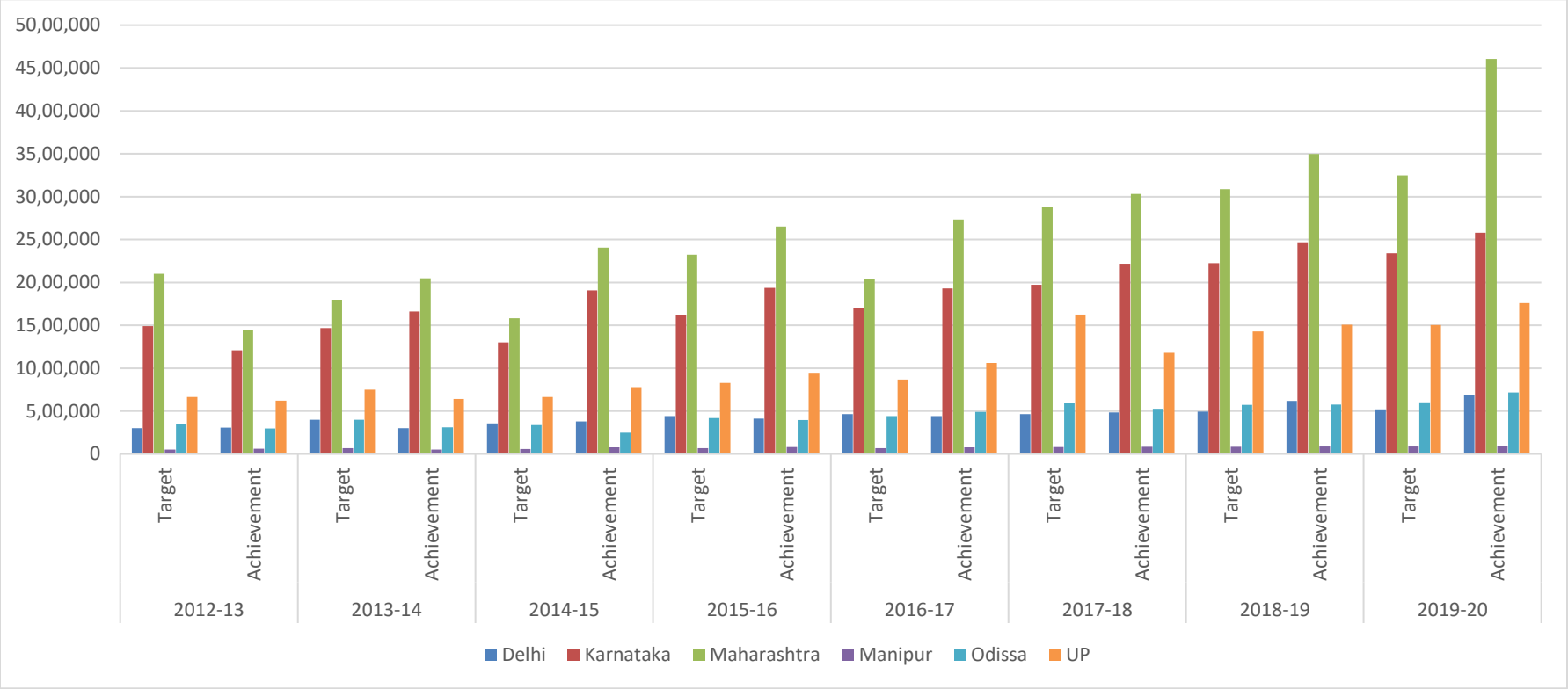


Figure3.3 Year wise General Individual HIV testing target and achievement under NACP-IV and extension period at State Level

Pregnant Women HIV Testing and Achievement

It has been observed that across the country, there has been an increase in HIV testing in pregnant women every year. 8.8 million women got tested for HIV against the target of 11 million in 2012-13 and the testing number got escalated to 26.5 million exceeding the target of 23 million(approximately) in 2019-20 as displayed in Figure 3.4. There has been an increase in three (3) folds in the number of such cases. In Delhi and UP, achievement against the target has not been up to the mark in the last 8 years except for the one year i.e. 2012-13 and 2016-17 respectively, where the target has been achieved. In Manipur, only 24 thousand pregnant women have been tested for HIV against the testing target of 40 thousand in 2014-15. In Karnataka and Manipur, the target has not been achieved only in three years of NACP-IV and extension period whereas in Orissa target has achieved only in three years as displayed in Figure 3.5.

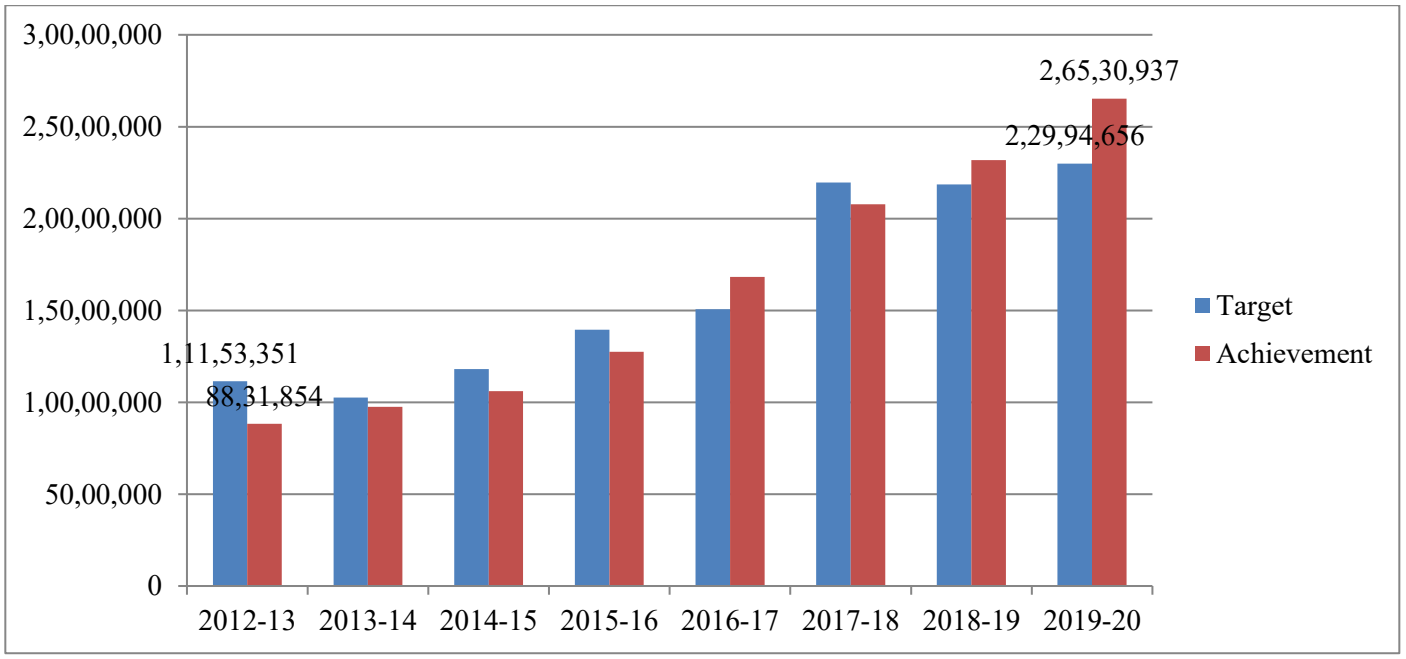


Figure3.4 Year wise pregnant women testing target and achievement during NACP-IV and extension period at the National Level

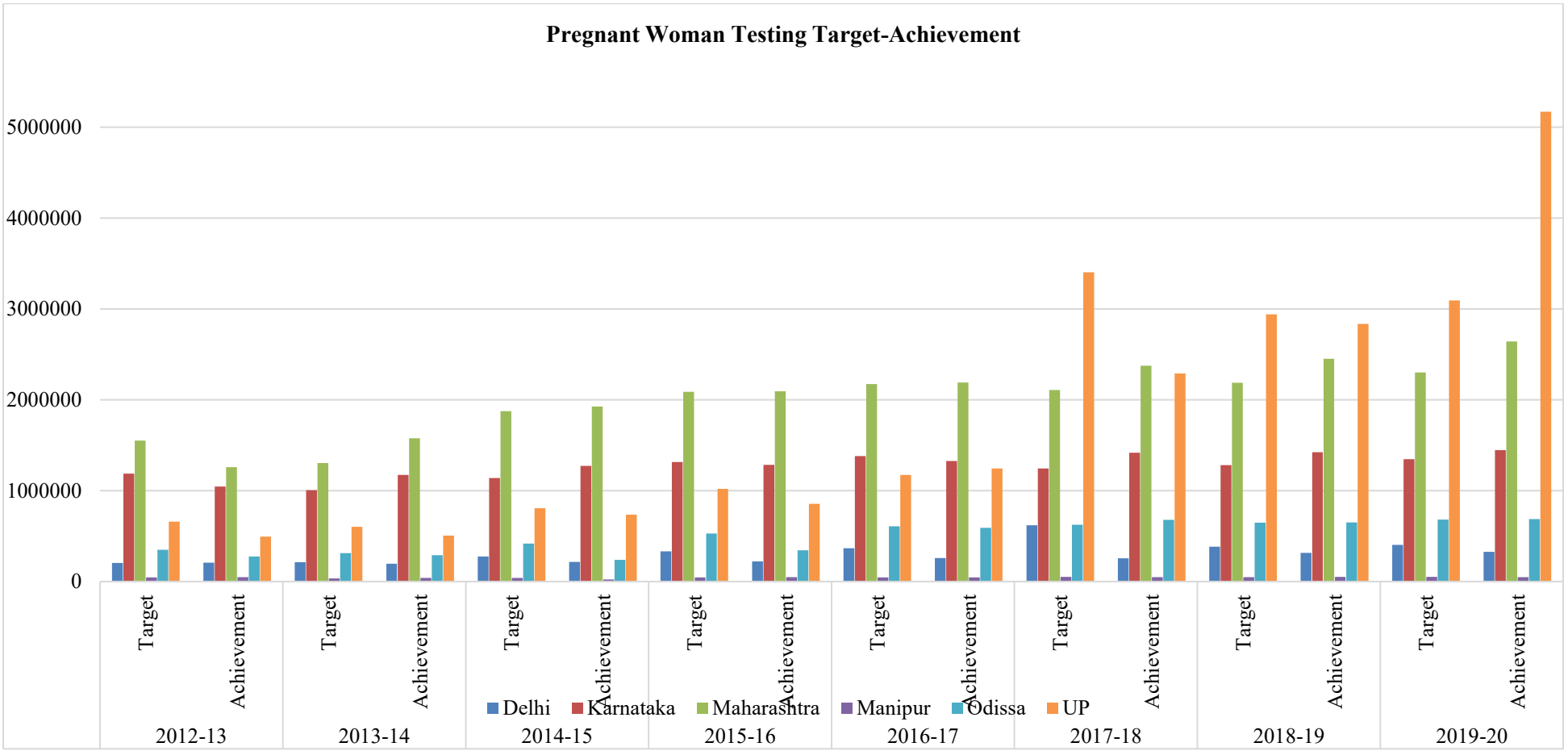


Figure3.5 Year wise pregnant women testing target and achievement during NACP-IV and extension period at the State Level

Early Infant Diagnosis (EID)

EID programme was launched in India in April 2010. In the early stage, one thousand one hundred and fifty-seven (1,157) EID centres and seven (7) PCR testing labs were providing EID services, but later it has been scaled-up, at present upscaling of EID centres has been done for all standalone fixed ICTCs which are five thousand two hundred and thirty-seven (5,237) in number for early detection. Figure 3.6 depicts the year wise EID i.e. the number of live births to HIV positive mother and mother-baby pair received ARV prophylaxis for the last 8 years. Eleven thousand seven hundred and twenty-two (11,722) thousand MB pair received ARV prophylaxis against the twelve thousand five hundred and eighty-seven (12,587) live births in the 2012-13 and the MP pair receiving treatment against the live births got reduced in 2019-20. Among all the states under study, Maharashtra has the highest number of live births and mother-baby pair received ARV prophylaxis followed by Karnataka whereas least number of live births and mother-baby pair received ARV prophylaxis has been observed in Manipur as depicted in Figure 3.7.

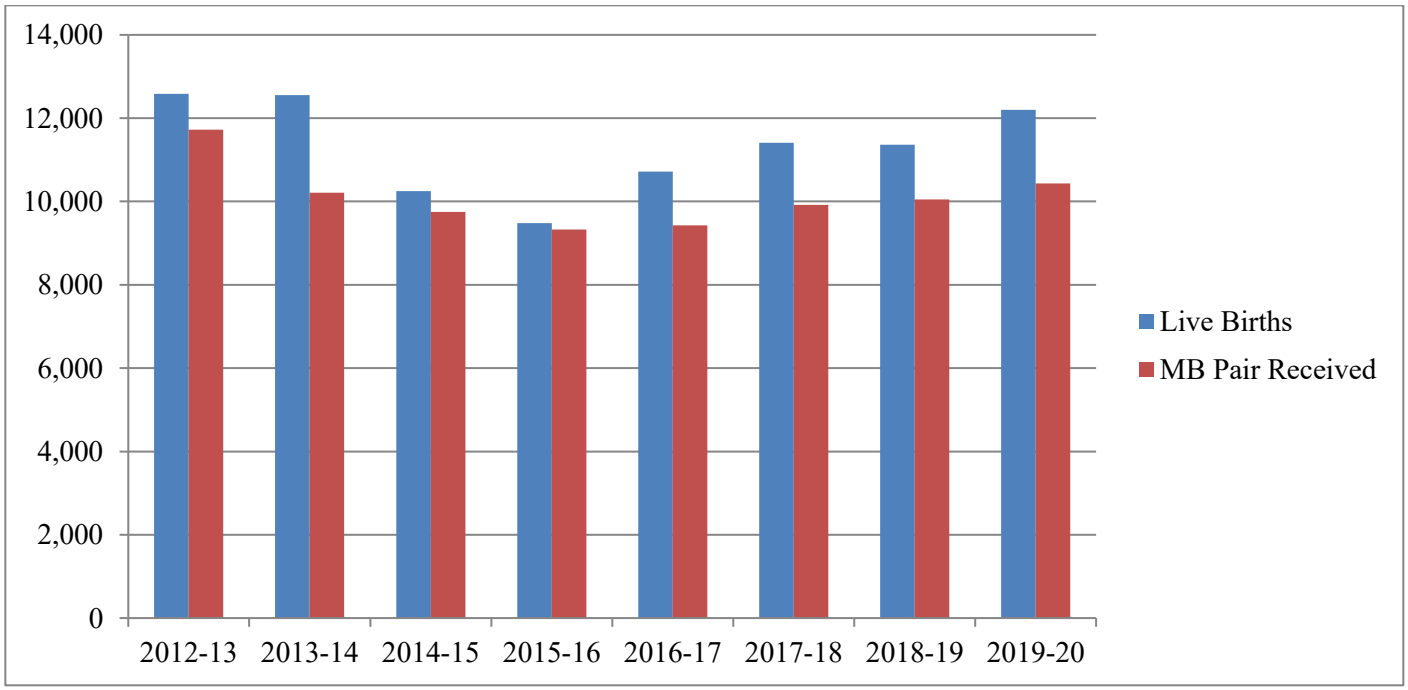


Figure3.6 Year wise live birth Reported, and Mother-Baby Pair (ARV prophylaxis) initiated during NACP-IV and extension period at National Level

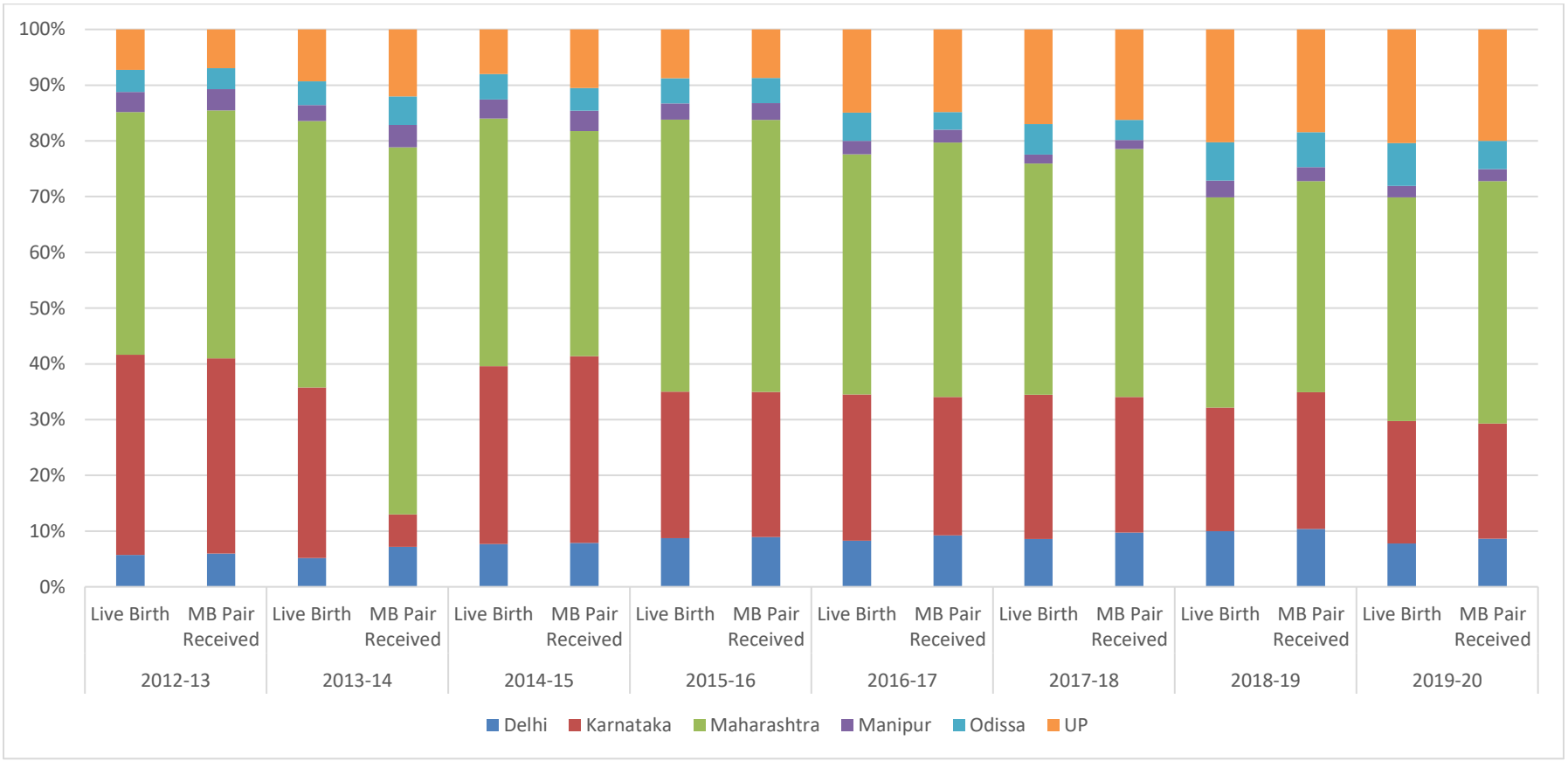


Figure3.7 Year wise live birth Reported and Mother-Baby Pair (ARV prophylaxis) initiated during NACP-IV and extension period at the State Level

HIV/tuberculosis collaborative activities

The risk of TB infection among the HIV positive persons increases manifolds, as the evidence shows. Thus, HIV/TB collaborative activities are required for promoting cross-referrals for early diagnosis and treatment. The main objective of these collaborative activities is to reduce TB associated morbidity and mortality in PLHIV through collaboration between NACP and the Revised National Tuberculosis Control Programme (RNTCP). There is enhanced focus on ascertaining HIV status of all TB patients and the provision of HIV care including ART, for all known HIV infected TB patients and more focus need to be required further. In the financial year 2012, fifty-six (56) percent of TB patients knew their HIV status and eighty (80) percent of TB patient in 2019 know their status as shown in Figure 3.8.

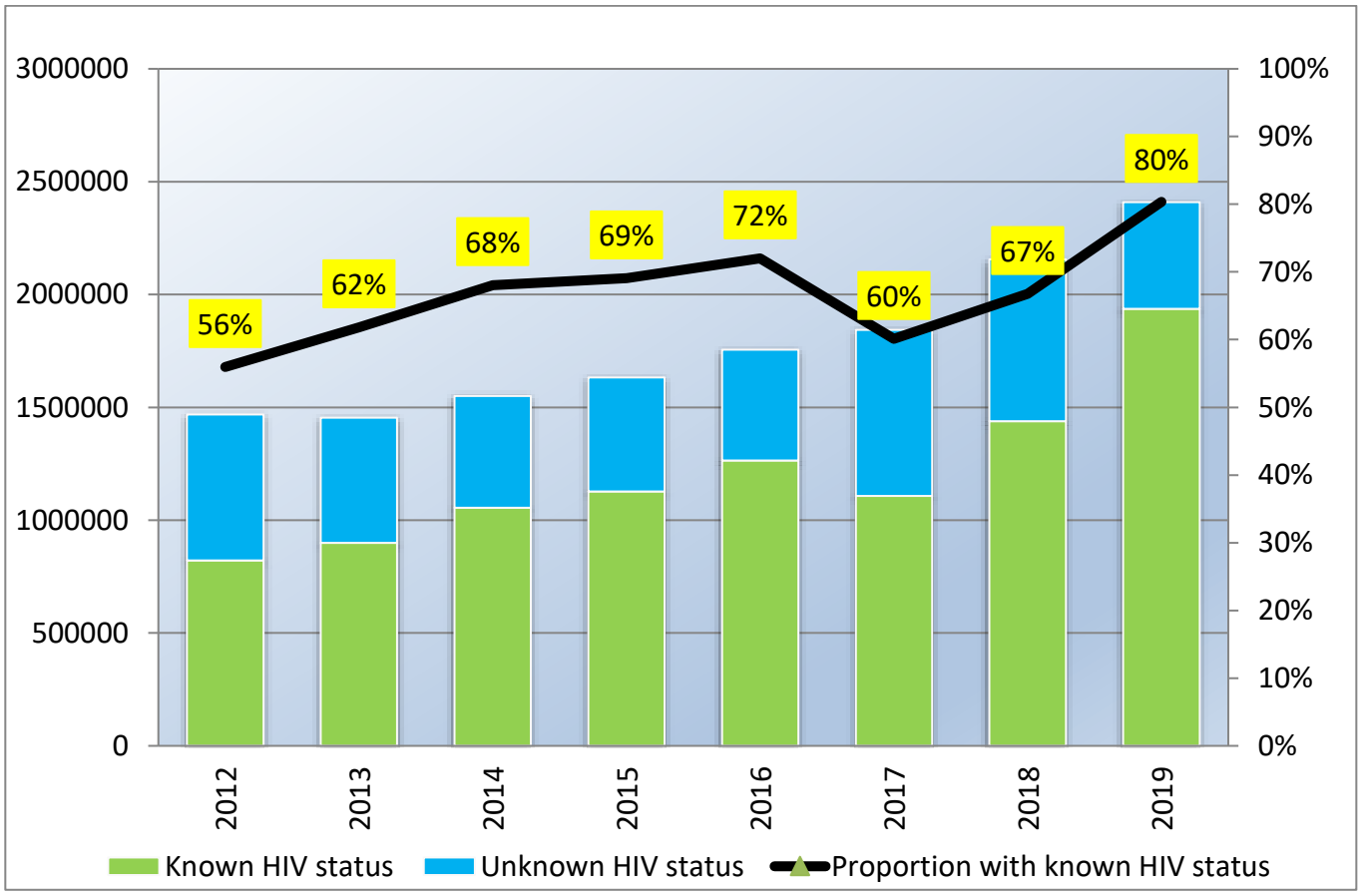


Figure3.8 Year wise trend in number and percentage of registered TB patients with known HIV status in public and private healthcare settings, National Level

Sexually Transmitted Infections (STI) AND Reproductive Tract Infection (RTI) Control & Prevention Programme

For controlling HIV transmission and reducing reproductive morbidities, the prevention and control of sexually transmitted infections are very important. Prevention, early diagnosis, and complete treatment help in reducing the transmission rate of HIV infections. STI/RTI Control programme is implemented through 1167 Designated STI Centres (DSRCs) branded as Suraksha Clinic for the general population and HRGs through TI by 1413 Preferred Providers. The colour-coded STI/RTI kits have been provided for free supply at all DSRCs and TI NGOs to standardize the treatment.

The key strategies for STI prevention and control are-

1. Interrupt transmission where it spreads fastest
2. Provide services for all who may need them.

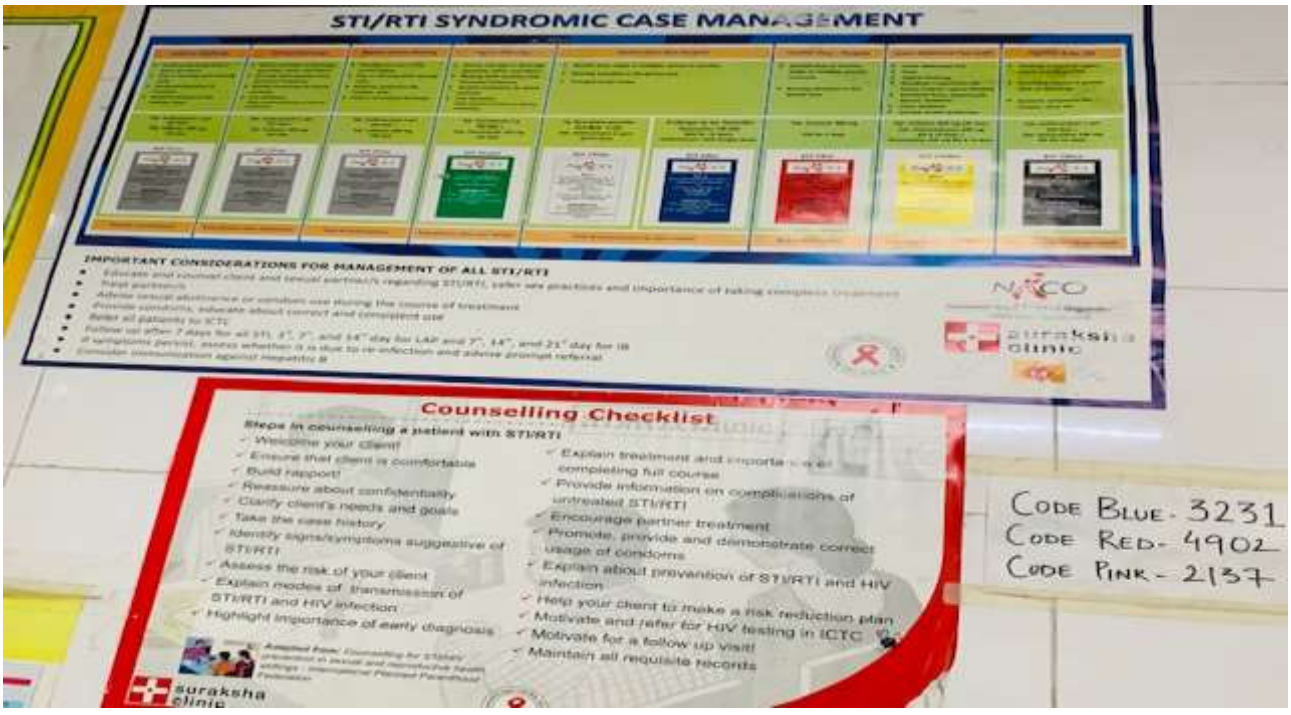


Figure 3.9 depicts the total number of STI cases managed including HIV and syphilis. It has been observed that the number of STI cases managed has increased by fifty-nine percent in the last eight years i.e. from forty-nine lakh fifty-three thousand three hundred and ninety-five (49,53,395) number escalated to seventy-eight lakh sixty thousand eight hundred and fifty.

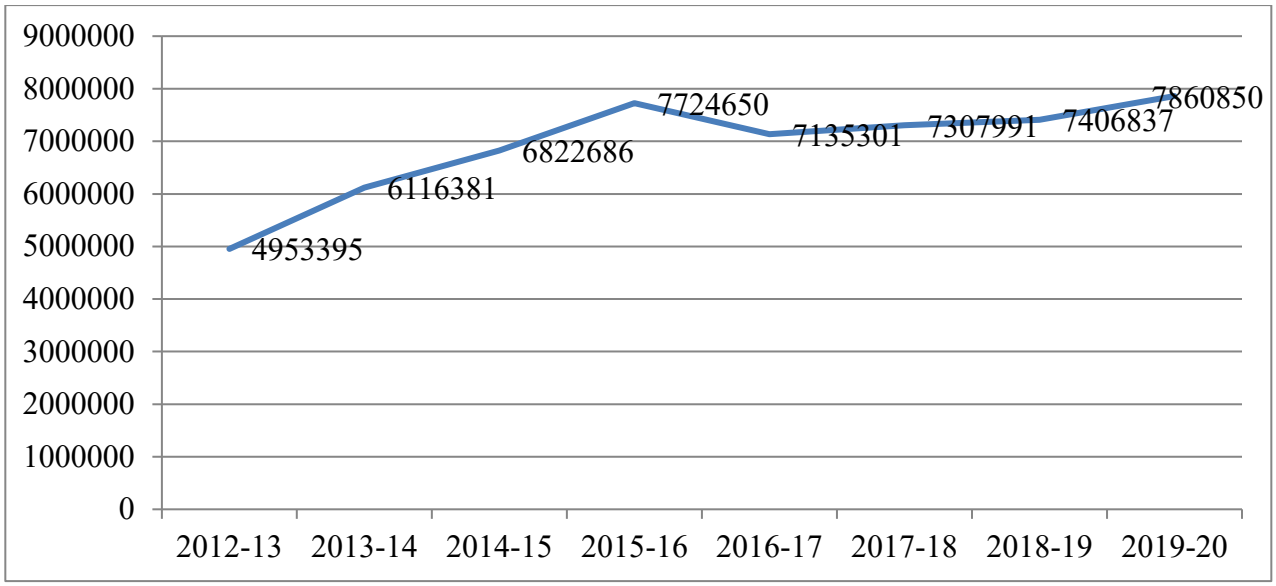


Figure3.9 Total number of STI cases managed including HIV and syphilis at National Level Source: NACO BSD PPT

"……SACS has provided us enough IEC material in the form of Broachers, Flip charts, Handouts, Pamphlets, etc) and both in Local language and English to manage STI cases as well as HIV Positive Cases…"

ABC Counsellor, STI Clinic, Bangalore, Karnataka

"Yes, I have seen posters on the walls of STI clinic...when so ever we visit hospital… but most of the posters displayed are in English. so it becomes difficult for us to understand…Also, I have been visiting this clinic from last 5-7 years….I am seeing the same posters from last so many years"

FGD Participant, Baba Ambedkar Hospital, DSACS

Issues and Challenges

- There has been a shortage of kits and drugs (2-3 times in a year) that can be disruptive and cause the services, adherence and follow up to be affected. Efforts and mechanisms need to be in place to anticipate the possible disruptions and addressed in time.
- Effective IEC materials are very important to the BSD and sometimes lack of the material adequate supply, adaptation, as well as updation, has been a challenge.
- In some places, the data entry is still being done in manual mode and then gets transferred to electronic more which can be delayed, causes access issues or cross-reference issues or have the potential of wrong data entries. This could have been because of a lack of computers, updates or manpower or training or whatever the cause may be could be avoided and addressed.

Women ABC aged 32 years, hailing from Banglore, Karnataka complaint of vaginal discharge visited STI Clinic, with anxiety and embarrassment, got tested for syphilis and HIV,and both tests were negative, but she still suffers from the feeling of being "dirty" with fear of negative reactions from her husband and family. She afraid that she will lose their family support and hence do not want to disclose their condition. This reluctant behaviour regarding disclosure of status leads to adverse consequences to her husband. Her husband is alcoholic and he always scolds her while having sex. She refuses to bring her husband to Suraksha Clinic. After three sessions of counselling and follow up she agreed and brings her husband, and when husband screened for HIV and Syphilis, he got positive to both HIV and Syphilis.

Her Husband refused to receive the reports and post test counselling too, and he scolded his wife to his condition, after several counselling sessions he agreed to get treatment for both. Presently he is on ART and his wife Tested negative after 3 months of window period, she repeats HIV tests biannually and is Negative. Both are happy and they demand condom regularly and using it consistently.

- HR and Salary issue major concern for Non-recruitment and High Attrition. Although there has been some revision off late it needs to be urgently addressed for the next phase.
- Key population requires to be understood and responded sensitively with some extra sensitivity in being relaxed in the Fixed/Rigid Timing and Processing of the Blood Samples from the new as well as returning key populations hamper the accessibility and usage of services.
- As the HIV-TB program has become an integral part of the HIV program, this necessitates Training and retraining of staff for both TB-HIV programme to make the engagement and delivery of the program services.
- DSRCs plays a major role in managing STI cases across states. A major referral comes from TIs and HRGs takes services from DSRCs. DSRCs should be treated a front face of customer/patient interactions. Therefore, all DSRCs should be fully equipped in terms of supplies of medicine, display of updated IEC material, fully-versed staff, IT and required infrastructure like waiting area/privacy etc.

Chapter 4 Care, Support & Treatment

The care, support and treatment (CST) components aim to provide comprehensive care and support to all PLHIV and treatment services for all those who require it. The overall goal of CST is to improve the survival and quality of life of PLHIV with universal access to comprehensive HIV care. CST services are provided through various service delivery models including (i) ART centres, (ii) Centre of Excellence (CoE), (iii) Paediatric Centre of Excellence (PCoE), (iv) ART Plus centres, (v) Link ART centres, (vi) Facility integrated ART centres, (vii) Differentiated ART centres, (viii) PPP ART centres and (ix) care and support centres.

Initially, ART centres are supported by NACO in terms of manpower, medicines, investigation and monitoring facilities etc, however, they are also operating in PPP mode, where the medical colleges are providing the manpower and medicines and other investigation facilities are looked up by the NACO. Decongesting of ART centres has been taking place because of the increase in patient load so that the quality of services can be provided.

Table 4.1 Number of CST facilities at National Level

CST Facilities	Mar-20
ART centres	553
Centre of Excellence (CoE)	11
Paediatric Centre of Excellence	7
ART Plus centres	93
Link ART centres,	1261
Differentiated ART centres	50
PPP ART centres	28
Care and support centres	310

Targets and Achievement under NACP-IV and Extension Period-National Level

It has been observed that the number of ARTC has increased over the years. From four hundred (400) in 2012-13 and the number got increased to five hundred fifty-three (553) in 2019-20 as shown in Table 4.2, there have been thirty-eight (38) percent increase in their numbers. Also, fifty (50) more ARTC has been approved and are operational. Over the last 8 years, progress has been made but more efforts are required to achieve the target. Currently, approximately 13.8 lakh of PLHIV has been provided free ART.

Table4.2 Year wise Target and Achievement in Number of ART centres

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Target- Number of ART centres	**400**	**450**	**500**	**550**	**600**	**600**	**600**	**650**
Achievement- Number of Functional ARTC	400	425	475	525	531	537	544	553
Achievement- number of PLHIV provided free ART	6,42,400	7,51,400	8,40,200	9,40,000	10,50,326	12,01,919	12,92,953	13,80,128

Source: NACO

Linkage from ICTC to ARTC (Target 95%)

In 2013-14, the number of detections at ICTC was 2.4 lakh, out of which, 1.9 PLHIV has been linked to ART, i.e. 80 percent as shown in Figure 4.1. In 2019-20, 1.7 lakh of people has been detected HIV positive at ICTC and out of which 1.6 lakh of people have been registered at ARTC, thus achieving the target of 95%.

Once the patient is diagnosed with HIV positive at ICTC, there have been great chances of losing the patient for further treatment. During the discussions with the NACO officials, some of the probable causes of losing the patients have been highlighted. Those could be the distance i.e. the ART centres are quite far, another alternative system of medicine has been adopted, side effects of the ARV medicines, and fear of disclosure or stigma associated. One of the major cause could be the counselling part has not been taken care of. Since the patients are initially asymptomatic and counselling has also been improper due to the insufficient time given by counsellors because of the increased workload, as a result, many patients are discouraged to continue with the treatment for the lifetime. These causes need to be properly addressed to achieve the targets.

"On average we deal with 100 patients/day, and with just two counsellors at the centre, we are not able to give proper counselling which we are supposed to…"

X counsellor, Baba Ambedkar Hospital, Delhi

"Due to the low remuneration, Doctor Post is vacant after being advertised for three times.."

Y Doctor, Baba Ambedkar Hospital, Delhi

"We are tested for Hepatitis infections but are not given any treatment at the centre for the same. We are forced to go to other hospitals which are very far for the treatment. It is not only time consuming, but also not possible because we don't have money to travel for availing treatment"

IDU Patient, FGD Participant, TI-NGO Naturals Care India

I am suffering from Kala Peeliya (Hepatitis-C) and on OST, this hospital doesn't provide medicine for the hepatitis-C so I have not taken any medicine for the same…. because I don't have money to take treatment from outside. It would be better if our other related health problems are taken care of in this centre……"

IDU Patient, FGD Participant, TI-NGO Naturals Care India

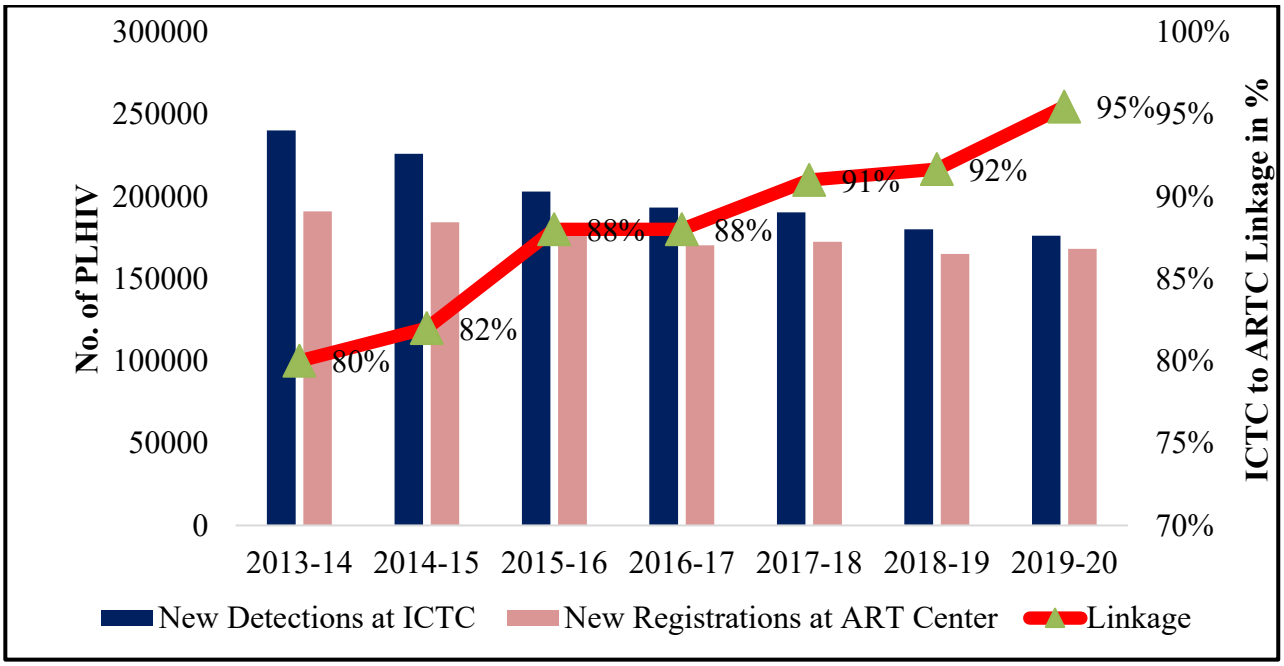


Figure4.1 Linkage from ICTC TO ARTC

ART Initiation among Registered PLHIV in ARTC (Target 95%)

During 2013-14, 1.5 lakh of PLHIV (61%) has been initiated on ART out of 1.9 lakh of registered PLHIV in ARTC. Only sixty-six (66) percent have been initiated on ART in 2014-15 and sixty-four (64) percent of PLHIV in 2015-16 as shown in Figure 4.2. In 2019-20 only ninety-two (92) percent of PLHIV has been initiated on ART against the target of ninety-five (95) percent.

Once the patient is registered at ARTC, there are high chances of losing newly registered patient for follow up because of the various reasons as mentioned above in the section linkage from ICTC to ARTC. The staffs of ART overcome this, by ensuring proper counselling being provided based on the psychological behaviour of the client. It is ensured by the ARTC the wellbeing of the patient along

with the medicines with no side effects. Also, it calls the patients once every 2 weeks. Also, the peer educators visit the CST centres for one-to-one discussion with the patient.

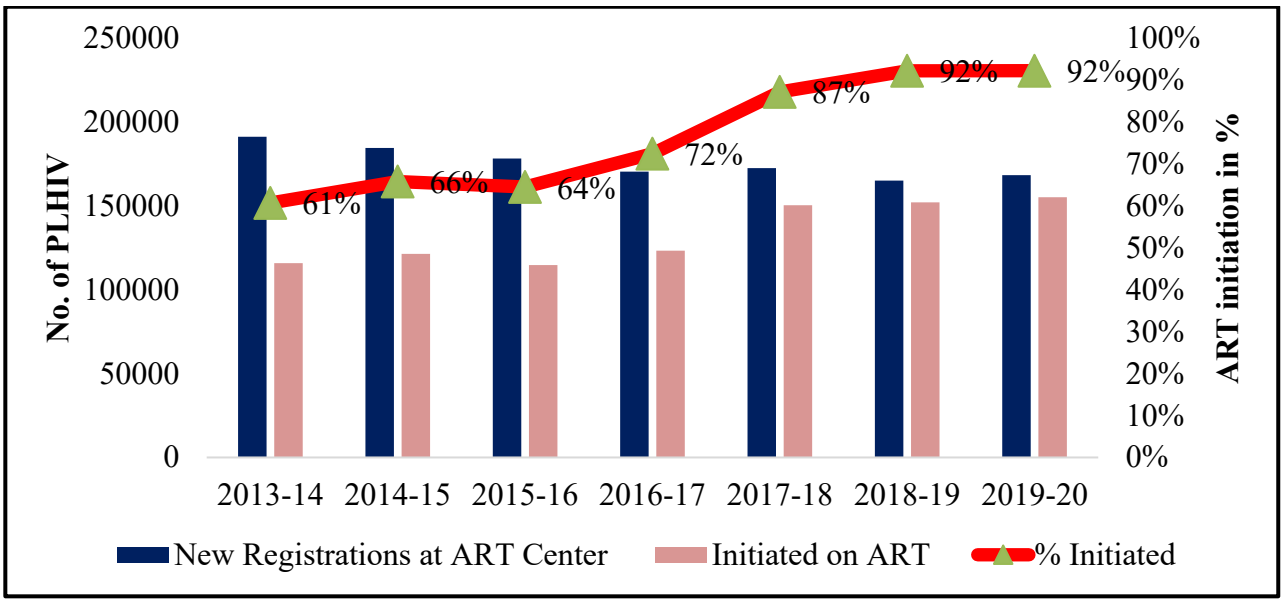


Figure4.2 ART Initiation among Registered PLHIV in ARTC at National Level

Retention Cascade

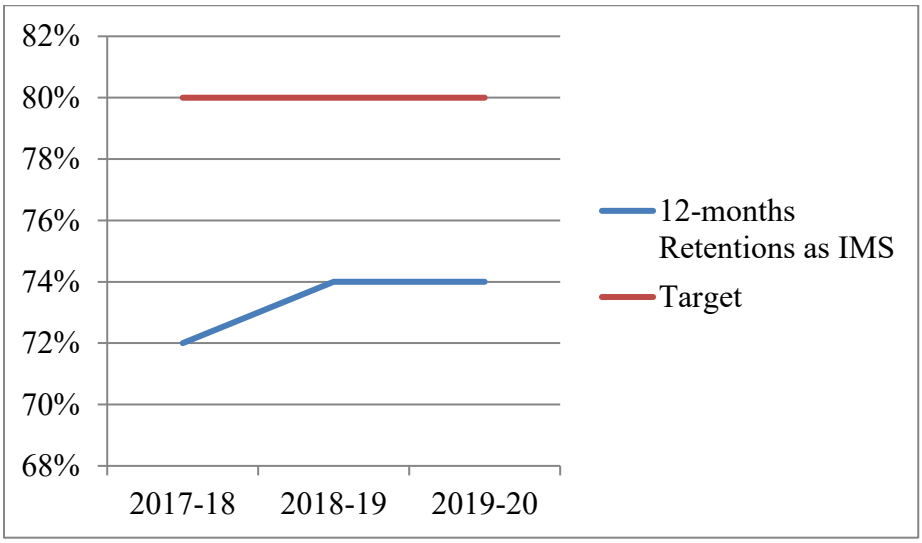


Figure 4.3 12 months Retention Cascade- Target Vs Achievement

CST division is closely monitoring retention cascade as a quality indicator at State and facility level. From the stage of diagnosis of HIV to linkage with ART care, ART initiation and retention of patients who are on ART are done by the Retention Cascade. The programme retains seventy-four (74) percent

of PLHIV in 2019-20 after 12 months of ART initiation against the target of eighty (80) percent. A significant amount of work still needs to be done to achieve the target (See Figure 4.3).

Targets and Achievements

The number of ARTC has increased in all the states under study over the last 8 years. Table 4.3 depicts the state-wise number of ARTCs during the NACP-IV and extension period. In Delhi, currently, twelve (12) ARTC, one (1) CoE, and one (1) PoE, two (2) viral load labs and CD4 testing at eight (8) facilities are in place. Patients registered in HIV care has increased by seventy (70) percent over the last 8 years. On March 2013, forty-two (42) thousand people registered at HIV care, out of which thirteen (13) thousands of them have been on ART and seventy-two (72) thousands of people registered in HIV care in March 2020, out of which thirty-three (33) thousands have been on ART as shown in Figure 4.4.

Table 4.3 Year-wise number of ARTCs in the Sample States

	March 2013	March 2014	March 2015	March 2016	March 2017	March 2018	March 2019	March 2020
Total	**400**	**432**	**475**	**525**	**529**	**535**	**544**	**558**
Delhi	9	9	9	11	11			12
Karnataka	55	61	61	64	64			65
Maharashtra	64	60	70	72	73	73	72	72
Orissa	9	9	12	15	15			
Manipur	9	10	10	13	13			13
UP	22	29	29	29	29	29	29	38

Karnataka is the only state, which has established ARTC in all the districts, link ARTC in all the talukas and fifteen (15) CSCs and five (5) TIs sites across states. CST facilities in Karnataka include (i) sixty-five (65) ARTC, (ii) three hundred and eleven (311) Link ARTCs, (iii) ten (10) ART plus centres, (iv) 1 CoE, (v) PoE respectively and fifty-seven (57) CD4 machines installed in the facilities. As of March 2020, 3.4 lakh of PLHIV have been registered in HIV care, out of which 1.7 lakhs of patients have been on ART and seventy-seven (77) thousands of patients are on ART have demised.

In Maharashtra, there has been an increasing trend in the number of patients registered on ART from 3.7 lakh in March 2013 to 4.3 lakh in March 2020. Out of this, 2.1 lakh of PLHIV has been on ART and fourteen (14) thousand on second-line ART. In Manipur, as on March 2020, thirteen (13) ARTC, seventeen (17) LACs, four (4) CSCs, are in place in CST division. It has been observed that twenty-two (20) thousand people registered in HIV care and out which, eight (8) thousand has been on ART in March 2013 whereas, in 2020, twenty-six (26) thousand people registered in HIV care and thirteen (13) thousands of them have been on ART, seven hundred and ninety-three (793) PLHIV has been on second-line ART and nineteen (19) patients on third-line ART. Similarly, in Orissa, PLHIV registered in HIV care has been increasing from twenty (20) thousands in March 2013 to thirty-six (36) thousand in March 2020. In UP, the number of CST facilities has increased over the last 8 years. Currently, thirty-eight (38) ARTCs, five (5) ART plus centres, twenty-five (25) link ARTCs, four (4) link ART plus centres and twenty-two (22) CD4 testing facilities are in place. The number of patients registered in HIV care has been increased from seventy-three (73) thousand in March 2013 to 1.6 lakh in March 2020. Similarly, an increase in PLHIV on ART has been observed from twenty-six (26) thousand in March 2013 to eighty-six (86) thousand in March 2020 as displayed in Figure 4.4.

CST INITIATIVES DURING NACP-IV & Extension Period

In 2014, NACO introduced an Inventory Management System (IMS) for improved access to HIV commodities for patients across the country. The programme initiated new TB-HIV activities in ARTC, i.e. ARTC has been acting as a single window for ART treatment as well as ATT treatment in 2016. In the same year, NACO rolled out new guidelines to initiate ART for PLHIV at CD4 cut off 500. Due to mutations in the virus, patients may develop resistance to first and second-line drugs despite good adherence, as a result, third-line treatment was launched in 2016. Test and Treat all policy was rolled out in 2017. Moving from CD4 cut off 500 to treat all was a critical way to reduce new HIV infections. To extend the benefits of test and treat policy, NACO has launched Mission Sampark on December 01, 2017, to reach out to all those who are aware of their HIV status but are not linked to ART. To strengthen the technical capacity of different cadres of ICTC and ARTC etc., NACO has signed an MoU with SAATHII for blended clinical training in 2018.

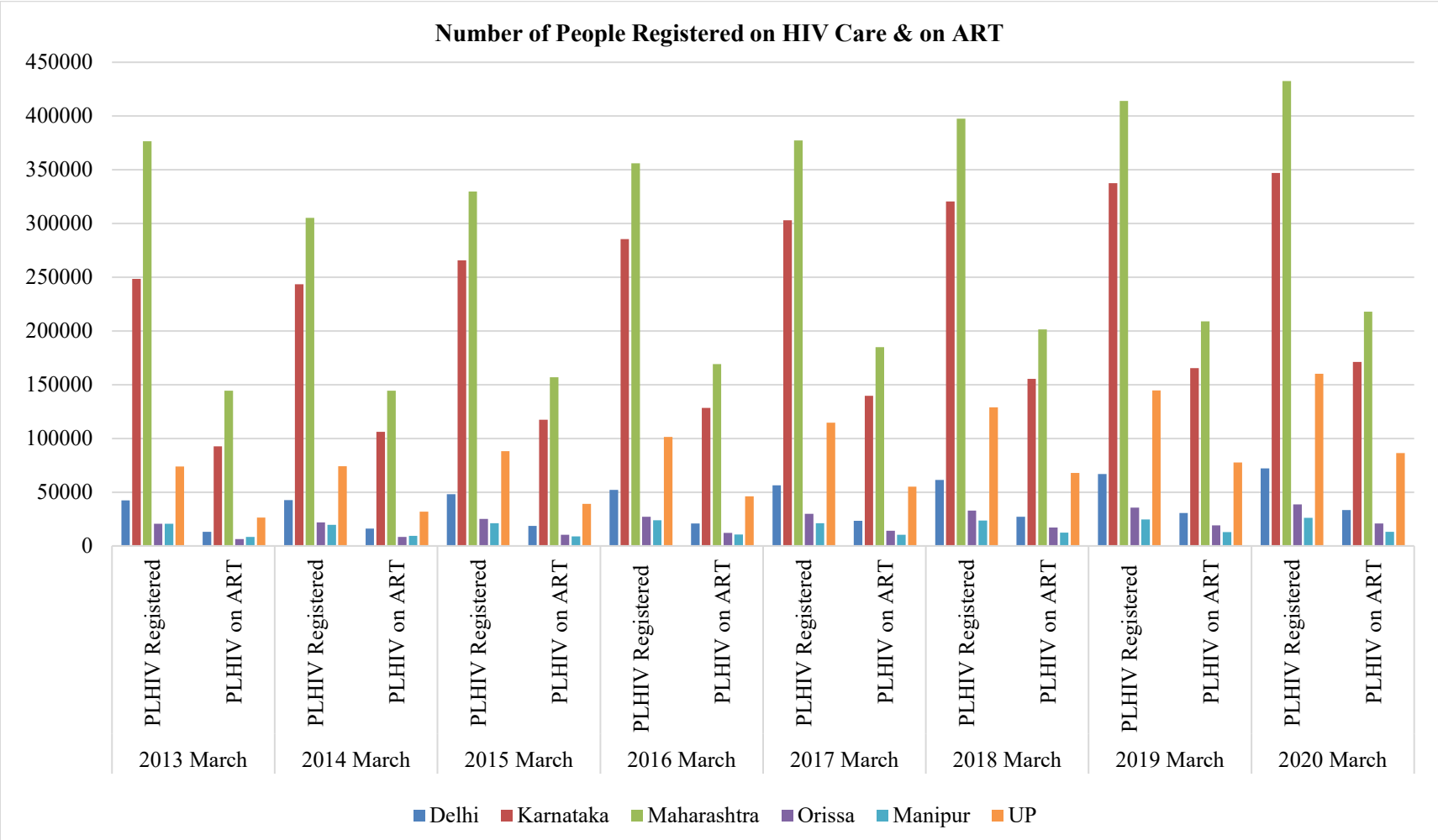


Figure4.4 Year-wise number of people registered on HIV care and ART in the states understudy

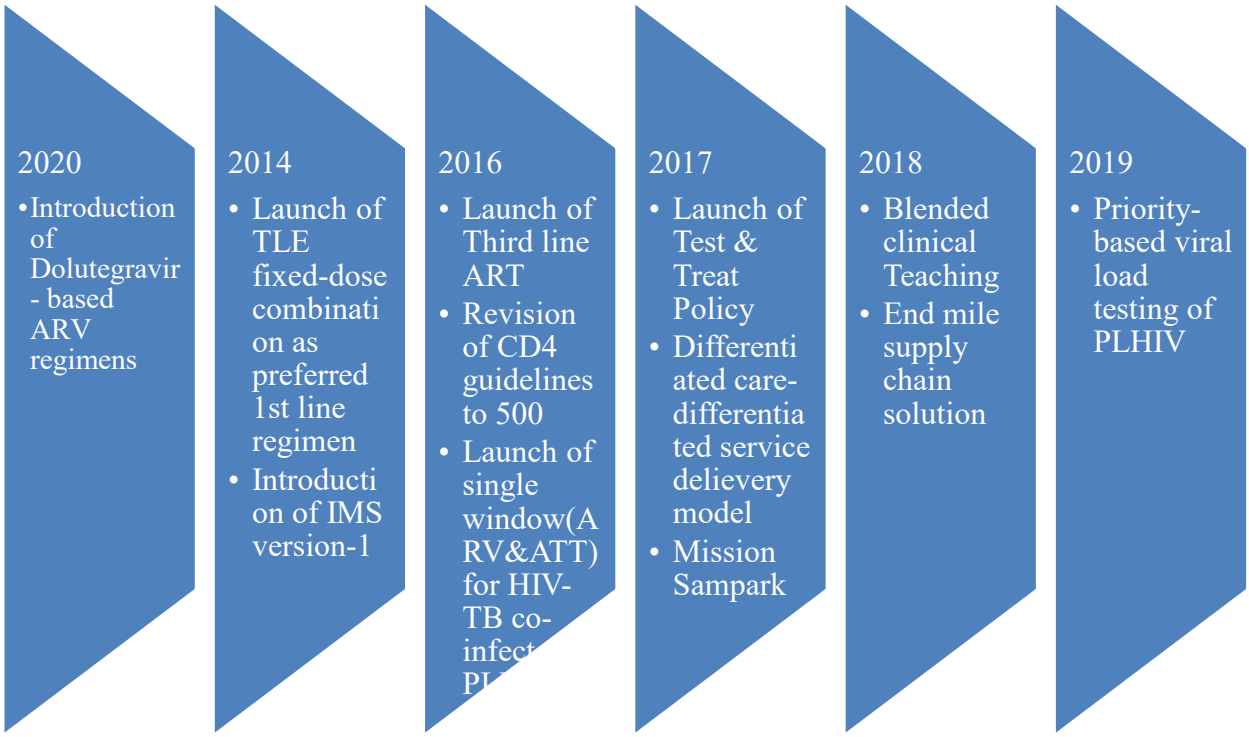


Figure 4.5 CST Initiatives during the NACP-IV and extension period Source: NACO CST PPT

HIV-TB Collaborative Activities

Tuberculosis and HIV are major public health problems globally and particularly so in India. These two diseases are leading causes of morbidity and mortality among all infectious diseases. The Government of India has advanced the target of elimination of TB under Sustainable Development Goals to 2025 -, five years ahead of the global timelines. In the year 2000, the NACP & Central TB Division joined hands to address the dual burden of TB and HIV jointly in six high burden states and its mandate was expanded across the country in 2008. Interventions were developed to ensure prompt detection of patients with TB-HIV comorbidity. These interventions helped in reducing TB related fatalities by 82% (baseline 2010) among PLHIV to meet the 2020 end TB target.

The objectives of the collaboration are to have close coordination between RNTCP and NACP at National, State and District levels & to decrease morbidity and mortality due to TB among persons living with HIV/AIDS. TB services are also provided as a referral service to the most vulnerable populations During the routine outreach services, the Peer Educator and other outreach team member screen HRGs and bridge populations for TB symptoms & refer them to the nearest TB centre for confirmation and treatment.

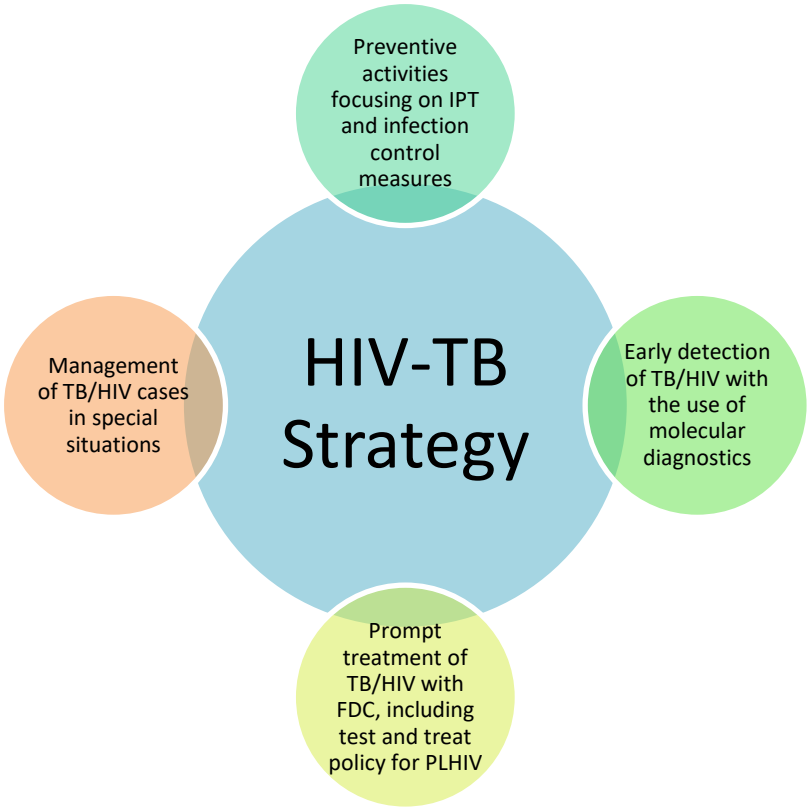


Figure 4.6 Strategic Framework for HIV-TB Prevention and Elimination

Achievements

a. Single window delivery of TB and HIV services powered by ICT (Information and Communications Technology) that enhanced monitoring of treatment adherence and TB preventive therapy was launched across Antiretroviral therapy (ART) centres.
b. Nearly 87% of Designated Microscopy Centres were located in proximity to HIV testing facilities.
c. 94% of PLHIV visiting the ART centres every month are screened about any existing TB symptoms.
d. More than 6 lakh PLHIV are given access to rapid molecular testing via CBNAAT for TB diagnosis.
e. The linkage of TB HIV co-infected patients to CPT and ART is 94% & 90% respectively.
f. More than 1,00,000 TB/HIV patients have been initiated on daily drug regimen across the country.
g. Nearly 90% of the TB/HIV co-morbid patients registered are on ART.
h. More than 7 lakh PLHIV on TB preventive therapy.

Issues and Challenges

- Good quality human resources are the backbone of any program. HIV/AIDS program has engaged such professionals over the years. But in recent times there has been a shortage of human resources in numbers and getting the right persons has been a significant challenge as is borne by the vacant position in the number of divisions and program components at national as well at state and district levels.
- One of the major issues in this regard has been the Less (not market/other Government Programme Competitive) remuneration of Doctors, Counselors and other staff at ARTC and other staff. There have been job requirement announcements but because of the compensation and incentive and support packages have been not attractive or competitive.
- Lack of recent Specific Training of Counselors on Partner's Notification which is a significant factor in the program is another gap and challenge.
- There have been instances of disruptions in Supply Chain of the Medicines which not only affects the current uptake and continuity but can cause disengagement as well as adherence and additional cost to the clients
- Tracking back of the patients is critical to take the counselling and recovery -the loss to follow up patients has been a challenge which can be resolved with learning from some of the pilot project undertaken in various places.
- One very important process and the mechanism is of a Centralized Portal of Registration of Patient at ART Centre which can make the services, tracking and counselling very effective and impactful. This could be undertaken in the next phase of NACP
- The tracking in parts is done at local centre level but there is no centrally operated tracking system and with customer engagement and follow up mechanisms such as SMS messages and using WhatsApp groups is a gap that can be filled in a strategic systematic way.

Chapter 5 IEC, Youth Mainstreaming, Advocacy, Adult Education Programme

IEC activities focus on awareness generation and continue to be the mainstay of NACP through vibrant multi-media approach comprising mass media, mid-media, on-ground mobilization, interpersonal communications, advocacy and partnerships in the country. NACO has developed a specific approach in developing and implementing the multimedia campaign. This starts with developing an annual campaign calendar with thematic areas having budget allocation, time and implementation plan like execution and monitoring of the campaign. For such campaigns, the existing media tools for guiding media plan development and monitoring of the campaign are used. The inputs are taken from professional agencies including government agencies and units of Ministry of Information and Broadcasting for considering Media-Mix, depending on demographic and target specific requirements. NACO has also been using new social media, helpline and mobile application in addition to the traditional media platforms. This has been done by building capacities of the states and encouraging them to have target specific audience to the new media.

Information, Education & Communication, Youth & Mainstreaming are important components of the NACP. With the expansion of services for counselling and testing, ART, STI treatment and condom promotion, the demand generation campaigns continue to be the focus of the NACP-IV communication strategy. IEC is the key to generating awareness on prevention as well as motivating access to testing, treatment, care and support. communication strategy aims to increase knowledge among the general population (especially youth and women) on safe sexual behaviour, to sustain behaviour change in at-risk populations (high-risk groups and bridge populations), to generate demand for care, support and treatment services, to strengthen the enabling environment by facilitating appropriate changes in societal norms that reinforce positive attitudes, beliefs and practices to reduce stigma and discrimination, to generate demand for HIV/AIDS-related health services like condoms, ICTC/PPTCT facilities & use of condoms for safe sex.

- Implementation of 360-degree campaigns for HIV and Youth
- Campaigns – World AIDS Day, Blood Donation, Targeted Interventions/High-Risk Group, Social Media, Mid Media, Folk Media, PPTCT, Stigma and discrimination

IEC Initiatives During the Evaluation Period

Operational Guidelines and Standard Operating Procedure (SOP)

The IEC division developed Operational Guidelines and Standard Operating Procedure (SOP) for effective route planning, implementation and monitoring through engaging District Support Team (DST). The folk media is being implanted in 30 States/UTs. Approximately 2 corers people are reached out by folk media campaign across the country. In the NACP IV, NACO has revamped the IEC material development system by involving communities, NGOs, development partners and states (SACS'). A systematic methodology has been used for developing of IEC and behavior change materials for programme, users and typology. The materials have been developed in the regional languages for facilitating and supporting state for reducing time and maintain uniformity across the country. The materials developed are shredded with the state for adoption as per state-specific needs. In this phase new materials are developed for Targeted Intervention (TI), Elimination of Mother to Child Transmission (EMTCT) programme, Care Support & Treatment (CST) and addressing youth vulnerability.

Social Protection Strategies

IEC division evolved social protection strategies for people infected and affected by HIV during NACP IV. In this 'DAPCU led Single Window Model for Social Protection for PLHIV, MARPS & CABA' was piloted and scaled up in 188 DAPCUs. Social protection benefits are made available through advocacy & mainstreaming efforts with various departments, institutions, private sector and civil society. People infected and affected by HIV are considered on the priority basis for state-level social protection schemes and access to benefits. Directives are issued by various departments in States & UTs. Social protection benefits are majorly available in nutritional support, free and concessional travel benefits for treatment purposes, financial assistance, and others.

Campaign Innovation

During NACP IV several innovative campaigns were launched. To exemplify the same, a Zebra crossing saves lives by slowing down traffic to allow pedestrians to cross safely campaign was piloted and launched. It contains a message "What if these white stripes of safety could remind pedestrians of safe sex too?" With a simple modification, NACO converted a crosswalk's white stripes into condom symbols. Pedestrians were thereby educated to use condoms and prevent life-threatening

HIV and AIDS. While the campaign was going on free condoms sample was distributed to various adult age group and educated the people of senior age and convince them to talk to their adult kids freely about HIV/AIDS.

Objective- **Drive awareness about HIV & Inspire people to take actions as suggested by NACO**

After doing 2 successful campaign and about for increasing awareness of usage of condom in mass TG across PAN India and doing now NACO is going forward and has change the strategy has gone to the next level where they want parent to talk to adult kids freely about HIV/AIDS. Also working on the other theme of campaign where NACO wants to create awareness among the youth TG that before getting married to undergo HIV test for Healthy Family planning and safe sex.

Campaign is executed in 20 states across India with 3.5lac sqft. Major Focus in area where awareness for HIV is less.

The innovation is done in Banswara Rajasthan which is a tribal area and where the awareness is less. Initially people were hesitating to discuss HIV/AIDS and taking free sample. First we had to educate them about HIV/AIDS, secondly we have told them what are advantage of using condoms and how we can prevent ourselves and our adult's kids from HIV/AID that using Condoms, not using the used syringe, blood transmit ion. Being a tribal area it was very difficult to change the mindset of the people and convince them to take sample and make them understand the importance of discussing HIV/AIDS Issue with their adult kids.

1097 Helpline

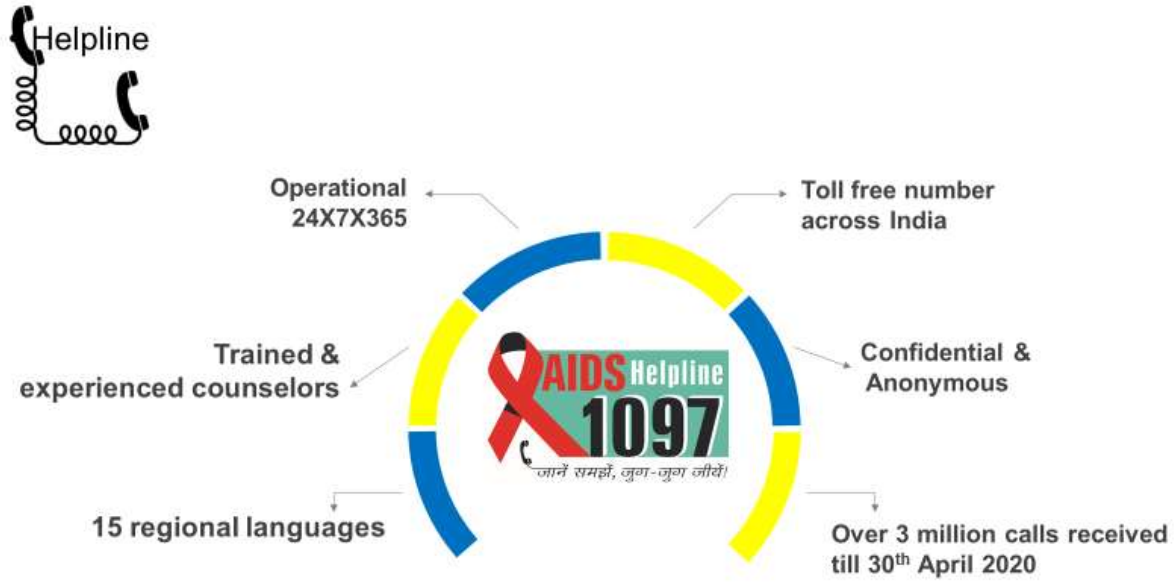
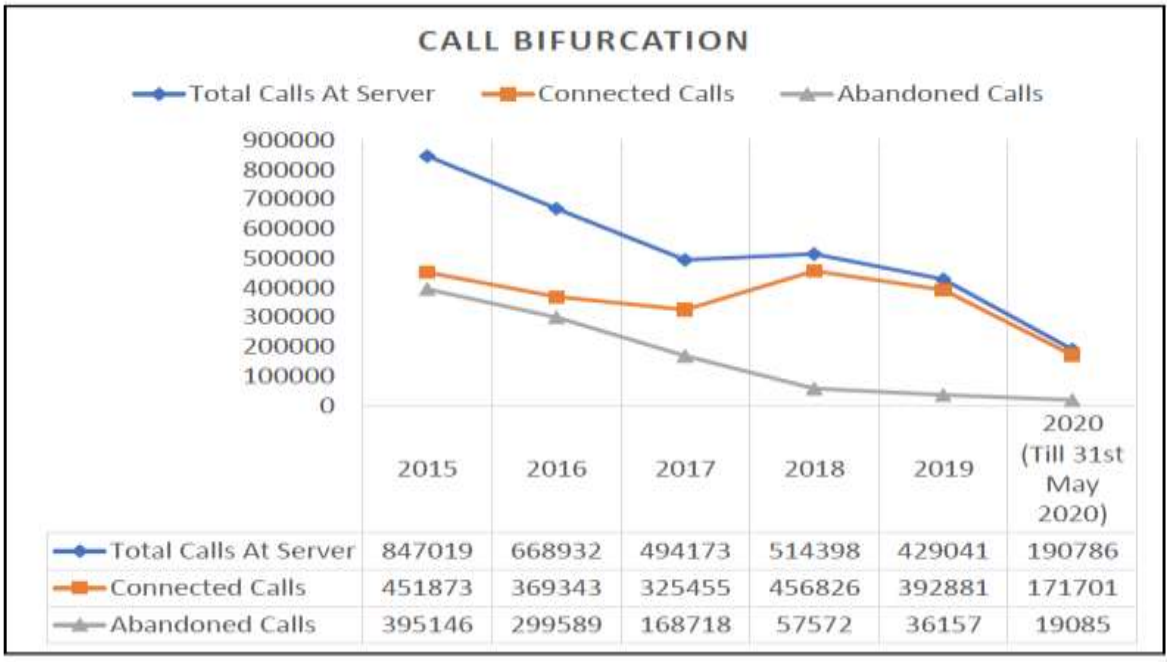


Figure5.1 Features of 1097 AIDS Help Line

NACO launched a toll-free helpline number — 1097 — on World AIDS Day December 1, 2014, to answer queries related to HIV/AIDS. The helpline number, that has been developed in collaboration with USAID, is functional 24X7. It was initially available in eight regional languages - Hindi, English, Telugu, Tamil, Kannada, Marathi, Assamese and Bengali. Now it is available in 15 regional languages (See Figure 5.1).



	2015	2016	2017	2018	2019	2020 (Till 31st May 2020)
Total Calls At Server	847019	668932	494173	514398	429041	190786
Connected Calls	451873	369343	325455	456826	392881	171701
Abandoned Calls	395146	299589	168718	57572	36157	19085

Figure5.2 Call details/dead calls (abandoned calls) From 1st Dec 2014 – 31st May 2020

Helpline contract was revised last time in June 2019. The period of the current contract is one year i.e., from 1st July 2019 to 30th June 2020. Review meetings with the implementation agency and programme officers are held regularly at NACO to review the operational performance. Capacity building of helpline staff is undertaken through virtual sessions. Appropriate promotional activities were suggested and undertaken at the state level for increasing the utilization of the service by the general population and PLHAs. Figure 5.2 presents the Call details/dead calls (abandoned calls) From 1st Dec 2014 – 31st May 2020.

2nd Regional North East Multimedia Campaign

NACO had initiated the North East Multimedia campaign in 2008-09 in three states viz. Manipur, Mizoram, Nagaland which turned out to be a great success. Keeping in view the success of Northeast Multimedia Campaign, NACO has planned to undertake a Mega Multi-Media Campaign in the whole

North-eastern region of the country i.e. the eight sisters' viz. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The target population for MMC will be youth between the age group of 15-29 years. The second North East Multimedia Campaign was organised in collaboration with National AIDS Control Organisation (NACO) & hosted by Manipur AIDS Control Society (MACS) on6th Feb 2020, at Bheigyachandra Open Air Theatre (BOAT), Imphal. The event indeed marked a big success as the number of audiences was more than 2500. The main objectives of the Campaign were to:

- provide greater visibility for the issue of HIV/AIDS,
- encourage safe and responsible behaviour among the youth,
- reduce the level of stigma and discrimination by demystifying HIV/AIDS,
- promote HIV/AIDS-related services, especially HIV testing and
- increase general awareness of HIV/AIDS.

Awards

1. In Outdoor Advertising Awards (OAA,2018) held in Mumbai on 27th -28th July 2018, NACO has begged awards for the Youth & HIV campaign in Public & Social Service category.

2. In Exchange FOR Media Awards (EFM) 2019 held in February 2019 in Delhi, NACO begged award for the innovation in outdoor media under Youth & HIV campaign.

Youth Activities

Adolescence Education Programme (AEP)

AEP is a key intervention to build life skills of young people and help adolescents cope with negative peer pressure and develop positive behaviour improving awareness on sexual health preventing HIV infections. 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 the Classroom. The programme is running in more than 55000 schools. In 2019-20, it is proposed that the programme will be initiated in 2189 more schools. Figure 5.3 elaborates the progress made on AEP in terms of Target Vs Achievement performance.

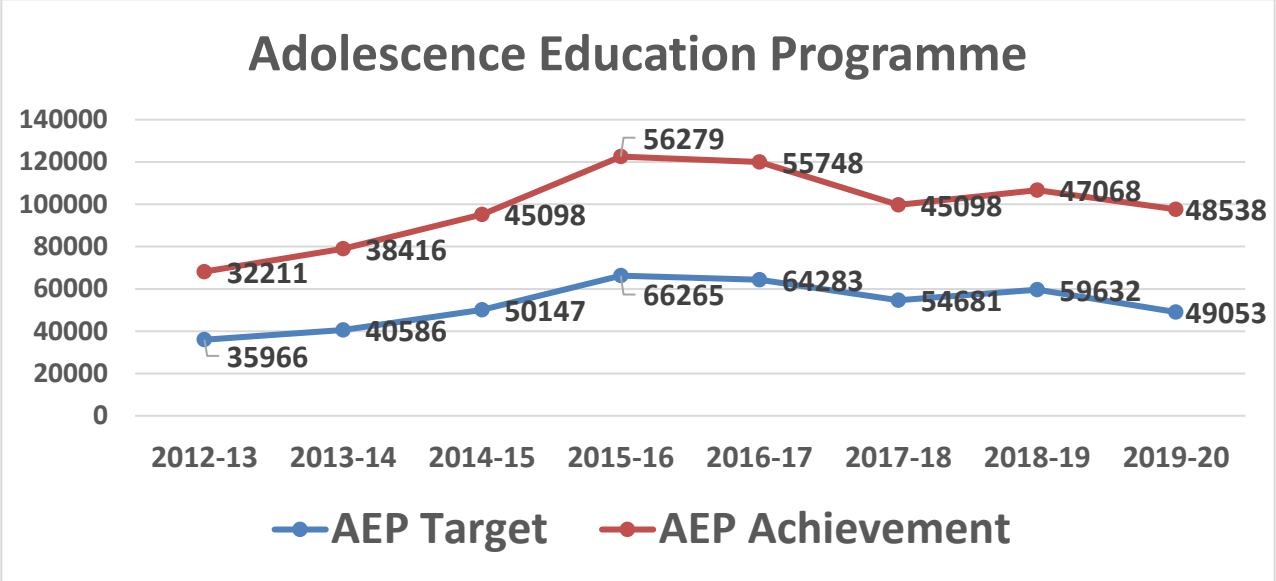


Figure5.3 AEP: Target Vs Achievement

Red Ribbon Clubs-Red Ribbon Club

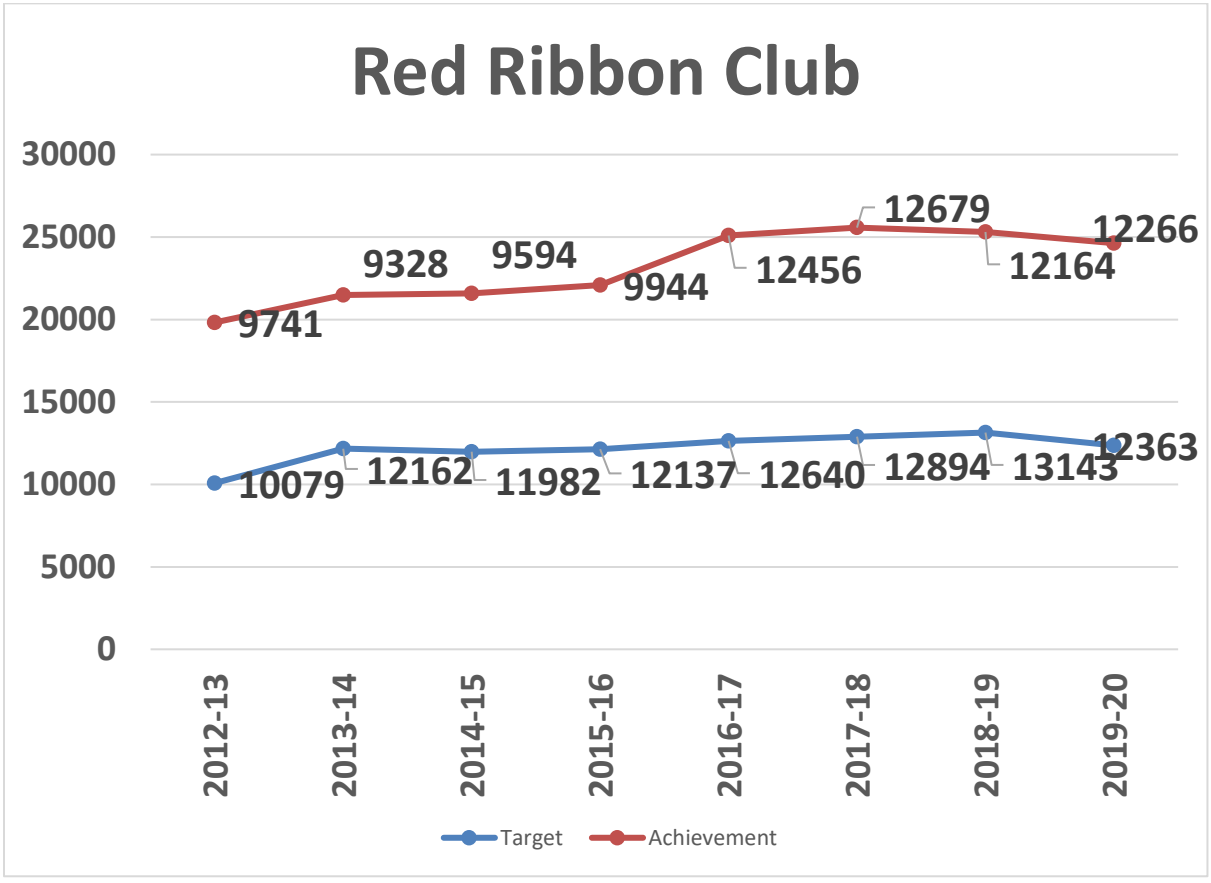


Figure5.4 Progress made on Red Ribbon Clubs during NACP & Extension Period

Red Ribbon Clubs-Red Ribbon Club (RRC) Programme is a comprehensive promotional and preventive intervention to harness the potential of youth in an educational institution, specifically to Mainstream HIV & AIDS prevention, care & support and treatment, Impact mitigation, Stigma reduction and Enhance voluntary blood donation. It also prepares and promotes youth peer educators within and outside the campuses. Programme is functional in 12616 colleges and Universities. In 2019-20, it is proposed that the programme will be initiated in 476 more colleges. Figure 5.4 describes the progress made on Red Ribbon Clubs during the NACP & Extension Period.

Out of School Youth Programme

Out of school youth are vulnerable impoverished, unemployed, under-employed, mobile/migrant youth, adolescents in sex work, young injecting drug users and street children as they are faced with high-risk behaviour in their everyday life. They are also less likely to have information on the risks of contracting HIV and means of protecting themselves from the infection. Such youth may face the repeated risk of HIV infection through sexual exposure due to coercion or other compulsions. The magnitude of the population of out of school youth case is felt by the trends of school dropouts in the country. States are implementing this programme through NYKS & NGOs. To strengthen OSY activities in the states in the year 2019-20 OSY activities are approved in 13 states.

Mainstreaming

National AIDS Control Organization (NACO) is collaborating with various key Ministries/ Departments of Govt. of India and other key stakeholders with the objective of multi-pronged, multi-sectoral response for risk reduction, integration of services and social protection for people infected and affected by HIV. Efforts are being made to formalized partnership and meaningful engagement and participation in HIV/AIDS prevention activities. Partnership with key Ministries/ Department of Government of India, industries of public and private sectors, PSUs and other key stakeholders will be strengthened. The planned activities for FY 2019-20 include a) Mainstreaming Conference b) signing of MoU and meeting of Joint Working Group at the national and state level c) Regional consultation in Northeast region in collaboration with NACO and NEC d) National and Regional Consultation on World of Work Response to HIV. Till date, NACO has signed 18 Memoranda of Understanding (MoUs) with key Ministries/ Departments of Govt. of India. Mainstreaming tried in

NACP IV in Health & non-health sectors for Risk reduction, Integration of Services and Social protection for PLHIVs and High-Risk Groups. The Strategies adopted include:

- Engagement of key Departments/Ministries
- Joint Working Group (National & State Level)
- Advocacy & Mainstreaming Training
- World of Work Response/ VCT@Work
- Social Protection for PLHIVs and HRGs
- Capacity building of PLHIV Network.

Till date, NACO has signed 18 Memoranda of Understanding (MoUs) with key Ministries/ Departments of Govt. of India. Other than working with Central Government Departments, NACO has actively worked with State Governments through SACS to enrol HRGs in various state social protection schemes (See Figure 5.5).

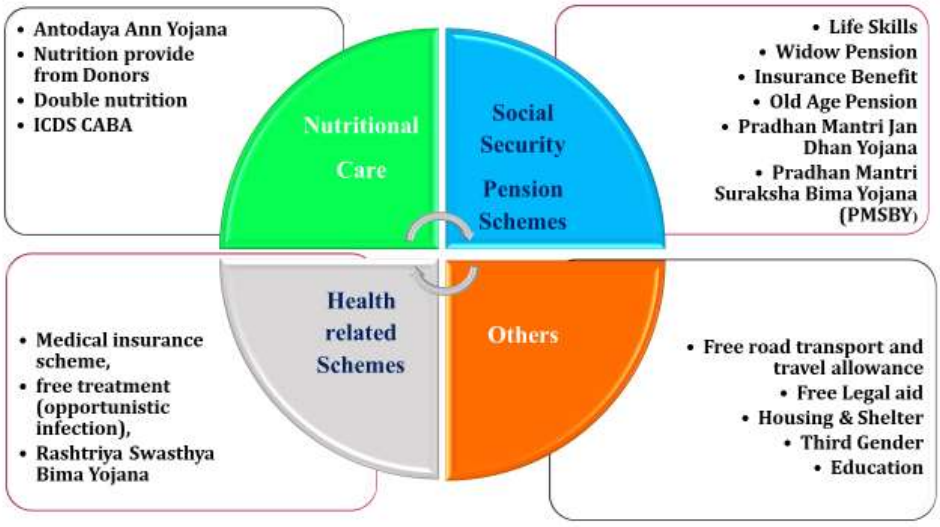


Figure5.5 Mainstreaming for Social Protection Scheme at State Level during Evaluation Period

Implementation of The Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (Prevention and Control) Act, 2017

The Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (Prevention and Control) Act is progressive legislation safeguarding human rights, legal rights and reinforcing constitutional rights for people living with HIV (PLHIV). The Human Immunodeficiency Virus and

Acquired Immune Deficiency Syndrome Bill, 2014 was passed by the Rajya Sabha on 21st March 2017 and by Lok Sabha on 11th April 2017. The act has come into force from 10th September 2018. The act envisages an enabling environment at workplace, education setting, health setting etc for people affected and infected with HIV and AIDS. The act also prohibits discrimination and provides for various rights like the right to hold elections, right to reside, purchase property and right to movement. The act has punitive provisions for people who spread hatred against people affected and infected with HIV and AIDS.

Issues and Challenges

- The IEC strategy development and guidance including Mass media, print media and social media campaigns are largely centralised strategy and action have led to agency dependency and event-based activities which are required at times but internal capacity strengthening at National states levels is required. This needs to be decentralised to SACS and DAPCUs to be able to respond to their local needs and situation more appropriately.
- An over-emphasis on Mass media and Social media has skewed the visibility on the ground and created a false impression of HIV/AIDS no longer being taken seriously. During the field visit, it has been found that there is a lack of direct communication in terms of educating

people living with HIV/AIDS. However, an emphasis on social media or Mass media does not have a reach or a capacity to educate the people about the disease.

- The focus on General Population and youth and migrants seem to be taking a lag other TI and CST IEC efforts. Aa focus on pregnant ladies has become more prominent as compared to reaching out to the general population/youth or the migrant labourers.
- Less allocation as well less IEC spending at state levels may be due to due to their technical capacity and procurement issues as well a dedicated IEC resource person, this can be addressed and resolved and tracked and would help resolve the issue easily.
- Lack of IEC strategy at state and district level causes the identification of insights derived from the Communication needs assessment and formative researches done there. There has been a lack of CNAs conducted in recent times.
- Measurement of IEC impact has not been done in the recent past either at national levels and in particular at state levels. This should be addressed in strategically and should be mandated.
- Focus on Stigma and Discrimination needs to be more emphasized in IEC campaigns...as has been communicated by the patients and the health service providers that the society still has discriminating views and people have a stigma towards the HIV patients, which is difficult to overcome. If the IEC materials are being prepared on the same aspects, it would be helpful to beat the social evil.
- The mainstreaming MOUs has been a very good achievement but there is no specific tracking and measuring mechanism to what they are doing and how this is making a difference. Further, these mainstreaming efforts could be leveraged by other division along with state units.
- AEP has been restarted in several states but there are still several states, where this is still a challenge and on hold. A national-level effort and consensus should be undertaken to resolve this. An updation on content and delivery structure and measurement is also required.
- Advocacy efforts like the HIV Act and Transgender bill have been a very good achievement but there has been a call for review HIV Policy as well as for re-energised and accelerate advocacy efforts to achieve the 2030 elimination of HIV/AIDS.

Chapter 6 Human Resources/Admin/Procurement

As a well-known fact, for the successful implementation of any programme, skilled and competent human resources are required. Committed and contended human resources can contribute not only to meet the stated objectives of the programme but also set a global standard for patient care. During the discussions with the NACO officials, it has come up that in the SACS and the NACO attrition rate is very high. Almost all divisions are facing challenges in not only sourcing good staff, but also in retaining skilled and trained staff. Due to poor remuneration structure, availability of the better opportunities in the market, there have been a large number of vacancies in all programme divisions, at the state and facility level, which has been found during the study.

Currently, a total of 104 staff has been working with NACO, out of which 39 staff is working regularly which includes the AS, JS, DDG, ADG, DD, section officer, and senior accounts officer etc. and rest has been appointed on contractual basis. Fifty-one consultants and 12 programme assistant and 2 support staff are the ones working on contractual basis.

The consultants in the NACO are engaged through the outsourcing agency i.e. the National Institute for Smart Governance (NISG) and are hired at three levels as shown in Table 6.1. Maximum gap has been seen in the post of Consultants where thirty-one (31) percent vacancy is observed whereas the least gap is observed in the National consultant post.

Table 6.2 depicts the component-wise sanctioned and filled positions of Consultants. A major vacancy has been observed in the Procurement division i.e. forty-four (44) percent followed by CST division (38 percent) among all the programme components of NACO. Eight (8) percent of vacancy has been observed in IEC division whereas there has been no vacant post in the Laboratory, Finance and HR division.

Table 6.1 Details of Consultant post- Sanctioned Vs Filled at National Level

Level	Sanctioned No.	Filled No.	Vacancy %
National Consultant	7	6	14%
Consultant	29	20	31%
Associate Consultant	30	25	17%
Total	**66**	**51**	

Source: NACO

Table6.2 Division wise sanctioned and filled positions of Consultants at National Level

Division	Sanctioned No.	Filled no.	Vacancy
CST	13	8	38%
BSD	7	6	14%
LS	3	3	0
TI	11	8	27%
SI	7	6	14%
IEC & MS	12	11	8%
Procurement	9	5	44%
Finance	2	2	0
HR	2	2	0
TOTAL	**66**	**51**	**23%**

Source: NACO

State-wise HR status

In most of the states under study, it has been observed that there is an acute shortage of officials at the state, district and block level. During the interaction with the SACS officials, on asking about the reasons for the vacancies, the study team has been informed that the SACS has been requested by the NACO (In the NACO letter No. 20011/01/2014-NACO(F)/RE/2014-15, dated 20.11.2014,) (ANNEXURE 5) not to fill any vacancy till further orders. In this regard, only essential vacancies have been filled for the interest of the programme.

Delhi

In DSACS, there have been six hundred forty-one (641) sanctioned posts, out of which five hundred thirty-two (532) staffs were appointed on a contract basis i.e. eighty-three (83) percent of the post are contractual post. Another one thousand five hundred (1,500) persons have been working in seventy-eight (78) Targeted Intervention Projects implemented through NGOs. Over the last 8 years, sanctioned posts have been increased from six hundred and one (601) in 2012-13 to six hundred and forty-one (641) in 2019-20 but vacancy has consistently low, i.e. less than 15 percent in the last 8 years as shown in Figure 6.1.

Table 6.3 depicts the division wise sanctioned, filled and vacant post at DSACS over the last 8 years. It has been observed that most of the vacancy has been in ICTC division followed by CST division. In ICTC division, two hundred and fifty-four (254) posts have been sanctioned for the NACP-IV and extension period, out of which twenty-two (22) seats have been vacant in 2012-13, which got escalated to thirty-six (36) vacant posts in 2019-20.

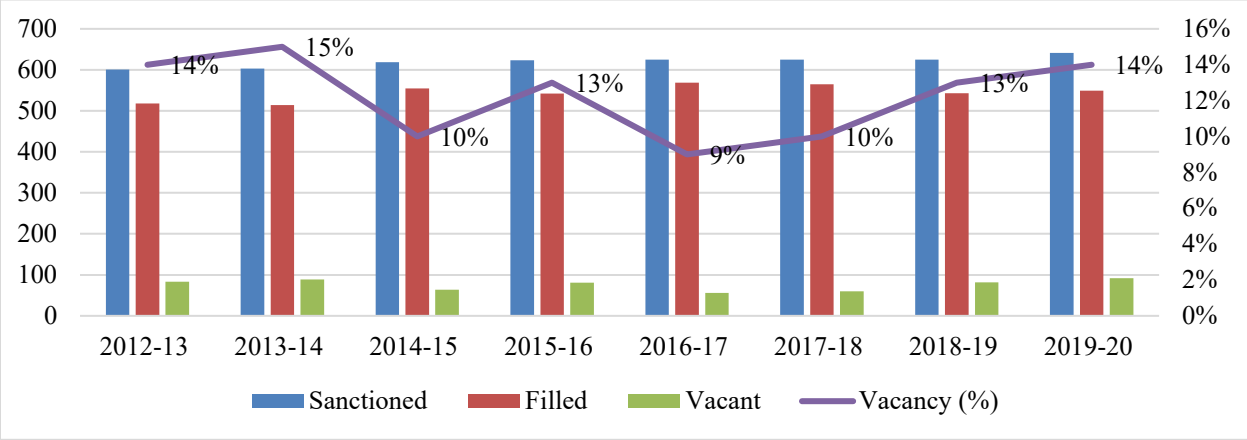


Figure6.1Year-wise sanctioned, filled and vacant post in DSACS

Karnataka

In Karnataka State AIDS Prevention Society (KSAPS) also known as Karnataka SACS, overall, the major vacancy has been observed in Blood Transfusion division i.e. thirty-five (35) percent followed by twenty-five (25) percent of a vacancy in HQ whereas there has been no vacancy in the Laboratory division in the last 8 years. In BSD, the numbers of sanctioned posts have been reduced by thirteen (13) percent i.e. from thirteen hundred (1,300) in 2012-13 to eleven hundred and twenty-eight (1,128) in 2019-20 whereas; the number of the vacant post has increased by fifty-two (52) percent i.e. from sixty-five (65) to ninety-nine (99) in the same period as shown in Table 6.4. In CST division, the number of sanctioned posts has increased by fifty (50) percent from five hundred and forty (540) in 2012-13 to eight hundred and ten (810) in 2019-20 and thereby the number of vacant posts has also increased from sixty-seven (67) in 2012-13 to two hundred and fifty-five (255) in 2019-20, i.e. almost by four-folds.

Maharashtra

In this state, overall major vacancy i.e. fifty-five (55) percent have been observed in the HQ followed by thirty-nine (39) percent of the vacancy in BTS division whereas least vacancy has been observed in BSD division in the last 8 years. In MSACS HQ, fifty-six (56) percent of vacancy has been observed in 2018-19 and 2019-20 respectively and fifty-four (54) percent of the vacancy in 2015-16. In BTS division, forty percent (40) percent of vacancy has been observed in 2018-19 and 2019-20 respectively. From two hundred and twenty-two (222) sanctioned posts in 2018-19, eighty-nine (89) posts are vacant whereas in 2019-20 out of two hundred and twenty-six (226) sanctioned posts,

ninety-eight (98) posts are vacant as shown in Table 6.5. Not able to get the right candidate and a high attrition rate due to low remuneration, etc are some of the reasons for these vacancies in this state. Also, there has been no deputation post advertised from the government side.

Orissa

Overall in the last 8 years, maximum vacancy i.e. fifty-six (56) percent has been observed in LS division followed by fifty (50) percent of a vacancy in BTS division whereas least vacancy has been observed in STI/RTI division. In DAPCU, thirty-four (34) percent of vacancy has been observed in each year of NACP-IV period. In BSD division, there has been a decrease of seven (7) percent in the sanctioned post in the last 8 years, from four hundred sixty-seven (467) in 2012-13, it got reduced to four hundred thirty-four (434) in 2019-20 and also decrease of nineteen (19) percent in the vacant post in the same period as shown in Table 6.6.

In Koraput district, various activities like DAPCU meeting, Grievance redressal committee, timely reporting of data, training on adolescence education programme for teachers etc, are not been conducted due to the vacant post of district programme manager from so long. In the Ganjam, which is a high prevalence district, having 25 ICTC, 3 STI clinics, 2 blood banks, 5 FICTC, and 2 ARTs, a lot of field-level issues are not being solved properly due to the limited staff as reported by OSACS officials.

UP

In UPSACS, overall in the last 8 years, the major vacancy i.e. forty-two (42) percent has been observed in HQ followed by twenty-three (23) percent of a vacancy in OST and least vacancy i.e. two (2) percent has been observed in LS and DSRC respectively. In HQ, the number of the sanctioned post was seventy-five (75) in 2012-13, and the number increased to eighty-five (85) in 2019-20. There is an increase of thirteen (13) percent in the sanctioned post and an increase of eleven (11) percent vacancy in the last 8 years. From forty-one (41) percent in 2012-13, the vacancy has increased to fifty-two (52) percent in 2020 as shown in Table 6.7.

Table 6.3 Division-wise sanctioned, filled and vacant post in the last 8 years in DSACS

	2012-13			2013-14			2014-15			2015-16			2016-17			2017-18			2018-19			2019-20		
	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant
BTS	70	64	6	70	64	6	70	64	6	70	64	6	70	64	6	70	64	6	70	64	6	70	63	7
CST	97	88	9	106	89	17	109	92	17	122	106	16	127	113	14	143	114	29	141	116	25	139	117	22
DSRC	40	35	5	40	38	2	40	39	1	40	39	1	40	39	1	40	39	1	40	39	1	40	36	4
HQ				53	45	12	52	47	12	52	46	13	53	41	19	53	36	21	53	33	23	53	32	24
ICTC	254	232	22	254	239	15	254	244	10	254	237	17	254	227	27	254	224	30	254	223	31	254	218	36
LS	6	6	0	6	6	0	6	6	0	6	6	0	6	5	1	6	5	1	6	5	1	6	5	1
OST	16	16	0	16	16	0	16	15	1	30	25	5	30	24	6	30	24	6	30	23	7	30	22	8

Table 6.4 Division-wise sanctioned, filled and vacant post in the last 8 years in KSACS

	2012-13			2013-14			2014-15			2015-16			2016-17			2017-18			2018-19			2019-20		
	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant
HQ				90	77	13	90	77	13	90	73	17	90	55	35	90	56	34	90	57	33	90	55	35
BSD	1300	1235	65	1300	1231	69	1300	1081	291	1300	1042	258	1128	1020	108	1128	1062	66	1128	1033	95	1128	1029	99
CST	540	473	67	680	587	93	691	637	54	730	611	119	760	585	175	770	585	175	790	570	220	810	555	255
BTS	126	47	79	126	47	79	126	85	41	151	88	63	151	88	63	145	96	49	145	96	49	145	101	44
STI	53	45	8	53	45	8	56	47	11	56	49	7	56	49	7	56	52	4	56	50	6	56	50	6
LS	22	22	0	22	22	0	22	22	0	22	22	0	22	22	0	22	22	0	22	22	0	22	22	0

Table 6.5 Division-wise sanctioned, filled and vacant post in the last 8 years in MSACS

	2014-15			2015-16			2016-17			2017-18			2018-19			2019-20		
	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant
HQ	87	47	40	87	40	47				87	38	49	87	38	49	87	31	56
DAPCU	156	141	15	156	141	15				156	135	21	156	135	21	156	128	28
ICTC/BSD	1372	1222	150	1372	1222	150				1372	1194	178	1372	1194	178	1188	1106	82
STI	56	46	10	56	46	10				58	47	11	58	47	11	58	56	2
CST	866	694	172	866	694	172				866	660	206	866	660	206	877	689	188
BTS	226	141	85	226	141	85				222	133	89	222	133	89	226	134	92
LS	29	22	7	29	22	7				28	21	7	28	21	7	49	37	12

Table 6.6 Division-wise sanctioned, filled and vacant post in the last 8 years in OSACS

	2012-13			2013-14			2014-15			2015-16			2016-17			2017-18			2018-19			2019-20		
	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant
DAPCU	35	23	12	35	23	12	35	23	12	35	23	12	35	23	12	35	23	12	35	23	12	35	23	12
BSD	467	289	178	467	302	165	467	325	142	467	337	130	467	302	165	467	301	166	434	292	142	434	290	144
STI/RTI	38	32	6	38	38	0	39	35	4	41	38	3	41	36	5	42	35	7	42	35	7	42	35	7
BTS	84	43	41	84	43	41	84	45	39	84	45	39	84	42	42	84	40	44	84	39	45	84	36	48
LS	6	4	2	6	3	3	6	3	3	6	3	3	6	2	4	6	2	4	6	2	4	6	2	4
OST	8	6	2	8	6	2	8	6	2	12	10	2	12	10	2	12	10	2	12	10	2	12	9	3
CST	63	60	3	74	70	4	97	92	5	118	99	19	120	105	15	126	96	30	129	91	38	133	88	45
Total	701	457	244	712	485	227	736	529	207	763	555	208	765	520	245	772	506	266	742	491	251	746	482	264

Table 6.7 Division-wise sanctioned, filled and vacant post in the last 8 years in UPSACS

	2012-13			2013-14			2014-15			2015-16			2016-17			2017-18			2018-19			2019-20		
	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant
BTS	215	198	17	215	199	16	215	189	26	217	192	25	217	202	15	211	193	18	211	191	20	211	188	23
CST	225	195	30	280	258	22	296	268	28	348	298	50	356	300	56	365	280	85	375	285	90	383	305	78
DSRC	96	93	3	96	96	0	101	100	1	101	101	0	101	96	5	101	97	4	101	96	5	101	100	1
HQ	75	44	31	75	52	23	85	56	29	85	52	33	85	49	36	85	47	38	85	43	42	85	41	44
DAPCU	20	19	1	20	19	1	20	18	2	20	18	2	20	17	3	20	17	3	20	17	3	20	17	3
ICTC	445	425	20	629	587	42	829	724	105	829	765	64	829	777	52	829	770	59	829	777	52	829	746	83
LS	20	20	0	20	19	1	20	19	1	20	20	0	20	20	0	20	20	0	20	20	0	26	25	1
OST	12	0	12	32	28	4	44	40	4	44	41	3	44	41	3	44	39	5	44	40	4	64	48	16

Issues and Challenges

- It has been observed during the interaction of the concerned personnel in different states, that many technical and non-technical positions are lying vacant, who have a crucial role to play at the grassroots level. A sincere effort must be there to fill in the posts, as the efficacy of the scheme depends on human resources.
- The salary of the staffs is not at par with the other national schemes or with any other similar occupation, which becomes a demotivating factor for the skilled personnel to be retained in their profession. The skilled personnel are in high demand as there are plenty of opportunities that exist in the market.
- Medical/Health profession is a knowledge-intensive profession, where the staffs must upgrade/update their knowledge and skills periodically. However, it has been noticed, that there is an absence in the capacity building of the staffs.
- NACO and SACS do not have well documented Human Resource Policy. Most of the issues on HR like recruitment, capacity building, promotion, exit etc. are ad-hoc in nature and lying in the form of Government Orders issued from time to time. As a result of this, there is a lot of ambiguity about the working environment, contract renewal, high attrition rate and job dissatisfaction.
- Lastly, frequent changes/transfer of leadership at SACS like Project Directors and additional Programme Director positions impact the progress of the programme.

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Chapter 7 Laboratory Services

Laboratory Services functions at the cross-cutting interface of all other programmes of NACO. It is recognised 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 NACP. Universal availability and routine access to quality-assured HIV related laboratory services are ensured in all service delivery points through this division.

The success of NACP-IV is banked on providing quality-assured laboratory services. Through this division, universal availability and routine access to quality-assured HIV related laboratory services have been ensured at all the service delivery centres. In the year 2000, the NACO has launched "National External Quality Assessment Scheme" (NEQAS) to assure the standard quality of HIV tests that are being performed in the programme. Some of the major activities of this division proposed under NACP-IV are to further strengthen laboratory services division at NACO, designate technical officers at NRLs, SRLs and establish a state-level division for laboratory services in all the SACS. Also, to ensure quality assurance in serological testing, supervision and training of laboratory personnel at every level located at NRLs, SRLs, CD4 and molecular testing laboratories. Besides, the evaluation of newer technologies and strengthen the NEQAS programme.

For the External Quality Assurance (EQA) programme, technical support has been provided to testing laboratories through the following existing tiered network –

1. Apex Laboratory (1)
2. National Reference Laboratories (13)
3. State Reference Laboratories (117)

For providing quality assurance in HIV testing, CD4 testing, Early Infant Diagnosis (EID), Viral load testing, it is mandated for this division to look for NABL accreditation of laboratories and to ensure more and more laboratories get accredited for quality standards. There is a total of thirteen (13) NRLs and one hundred seventeen (117) SRLs, under the NACP and at present all NRLs and seventy-two (72) percent SRLs are accredited as shown in Table 7.1. The process of accreditation started from 2009 onwards and the first laboratory got accreditation in the year of 2010. NACO aims at providing continuous capacity building programs for the staffs. Induction training for the Technical Officers (TO) has been organized; CD4 testing training for the laboratory technicians has been organized on

yearly basis, training on Quality Management System (QMS) at ICTC has been organized for two (2) days where approximately two hundred sixty-eight (268) trainers participated.

The NACO has formed "Consortium for kit quality" to ensure the quality of kits (HIV, HCV and HBsAg) with National AIDS Research Institute (NARI), Pune as the Headquarters of Consortium. This consortium has developed SOPs and thus is useful for the procurement of standard and quality assured kits at the state level. Figure 7.1 represents the number of kits evaluated by Consortium in NACP-IV and extension period. Each year more than eighty-five (85) percent of kits were passed whereas the maximum number of kits failed i.e. thirteen (13) percent were in 2013 followed by eight (8) percent of kits in 2016. One (1) percent of kits were invalid in the year 2014, 2016 and 2018 respectively.

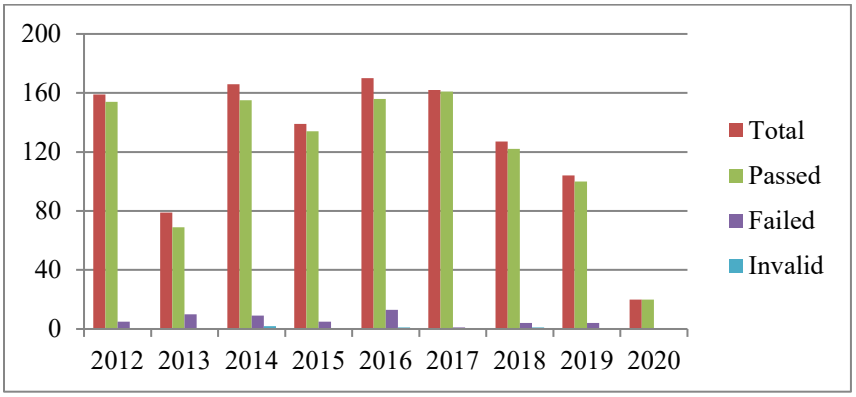


Figure 7.1 Number of kits evaluated by the consortium in NACP-IV and extension period
Source: NACO

Table 7.1 Accreditation status of HIV Reference Laboratories

S. No.	Target	Achievement
SRL	30%	72%
NRL	90%	100%

Source: NACO

CD4 and Viral Load Testing under NACP-IV and extension period

Recognizing the need for the quality CD4 testing across the country, facilities for CD4 cell enumeration has been increased. At present, there are a total of four hundred eighty-two (482) CD4 testing machines which have been installed at four hundred sixty-three (463) sites. Out of four

hundred eighty-two (482), two hundred sixty (260) are laboratory-based CD4 machines and rest two hundred twenty-two (222) is the point of care CD4 machines. Thirteen (13) training on CD4 laboratory QMS implementation has been done in which four hundred and forty (440) participants have been trained. The NACO have procured their CD4 and VL machines, kits, and looks after its AMC/CMC also.

One of the major initiatives under this division has been the launch of routine HIV-1 viral load test for all PLHIV on ART on 26 Feb 2018. Initially, the PPP model was adopted. Later on, a network of sixty-four (64) labs has been developed. Out of this sixty-four (64), forty-one (41) labs are operational. Also, forty-five (45) ARTC has been linked to these public sector labs and eight (8) labs have been accredited for viral load out of ten (10) VL labs, which have been operational before the scale-up in 2018 and rest two (2) is in the process. Besides, two forty (240) clinicians and lab staff have been trained on the aspect of VL testing and workflow.

Year-wise CD4 testing and VL testing achievement against target under NACP-IV and extension period have been displayed in Figure 7.2. It was observed that testing of VL has been achieved but the achievement of CD4 testing has been far behind the target. Approx 14 lakh CD4 test was performed in the year 2012-13 and the number went to twenty (20) lakh in the year 2018-19, i.e. there has been an increase in forty-three (43) percent in such numbers and then fall of 1.5 lakh has been observed in 2019-20. It is important to note that the utilization ratio of labs over the whole of NACP-IV and extension period is hundred (100) percent.

Table 7.2 provides a snapshot of the number of HIV reference labs in the states under study. It was observed that the maximum number of SRLs is situated in Karnataka followed by UP and the least number of SRLs is in Manipur.

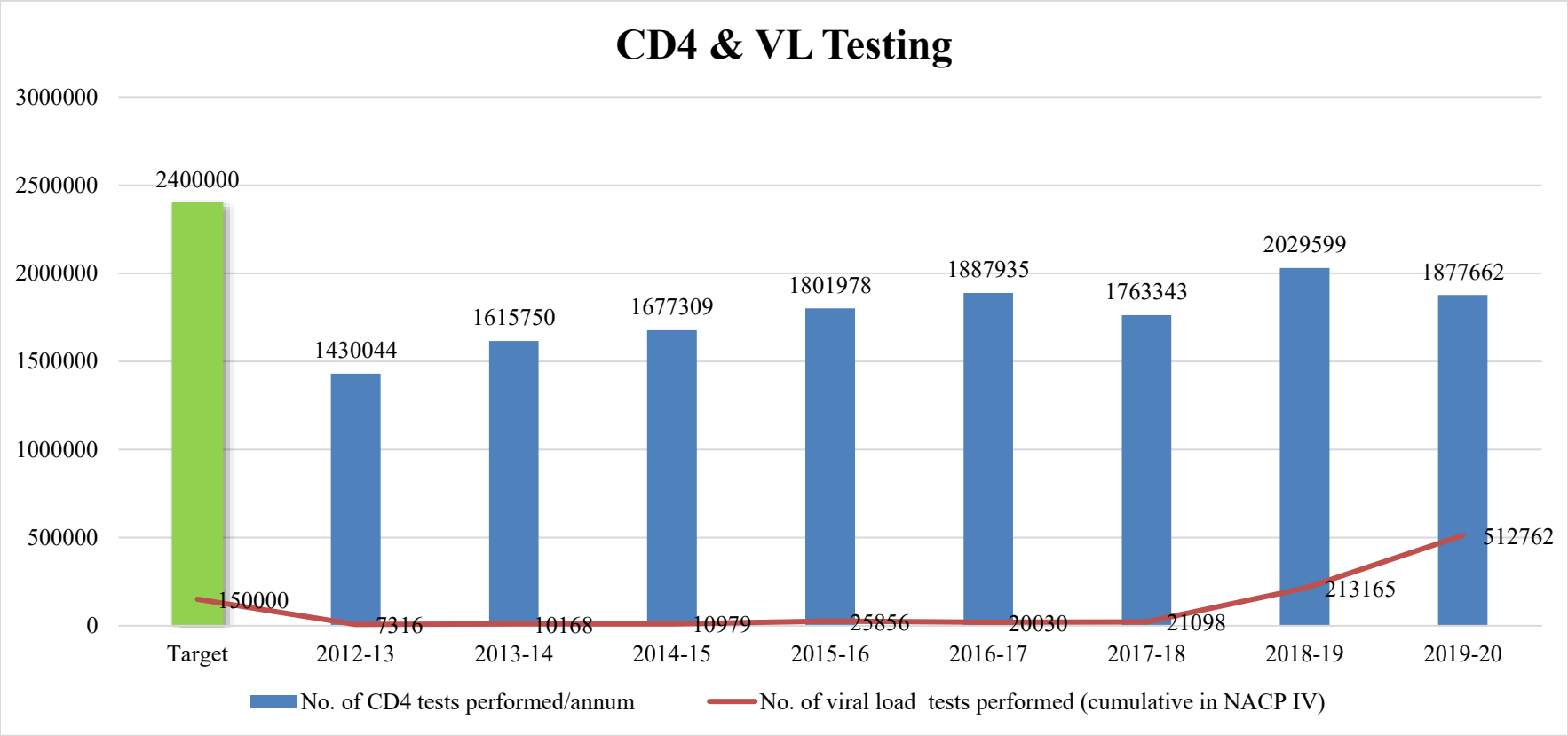
Table 7.2 Number of HIV reference labs across states understudy

	Delhi	Karnataka	Maharashtra	Manipur	Orissa	UP
NRL	2	1	1	1	0	1
SRL	4	10	7	1	3	9

New Initiatives

e- Prayogshala, a web-based tool has been developed for reporting the EQAS and QMS data but it's in the testing phase. Almost all the NRL and SRL staff has been trained for the same and ICTC staff will be trained during the upcoming EQA rounds. Username and Password have been required to use this tool. To get the user Id, the facility needs to be registered.

Blended Clinical Teaching has been initiated to support the NACP in building the capacities and skills of the facility staff working at ART, all laboratories and ICTC centres, in a sustainable manner, to improve service delivery mechanisms to PLHIV as well as to strengthen the data management systems of their centre/state. This will be a blended (both online and classroom) training programme. No recorded evaluation has been in place for any of the training provided so far.



Source: NACO

Figure 7.2 Year wise CD4 testing and VL testing achievement against target under NACP-IV and extension period at National Level

*Subject to a referral from ART centres

Issues and Challenge

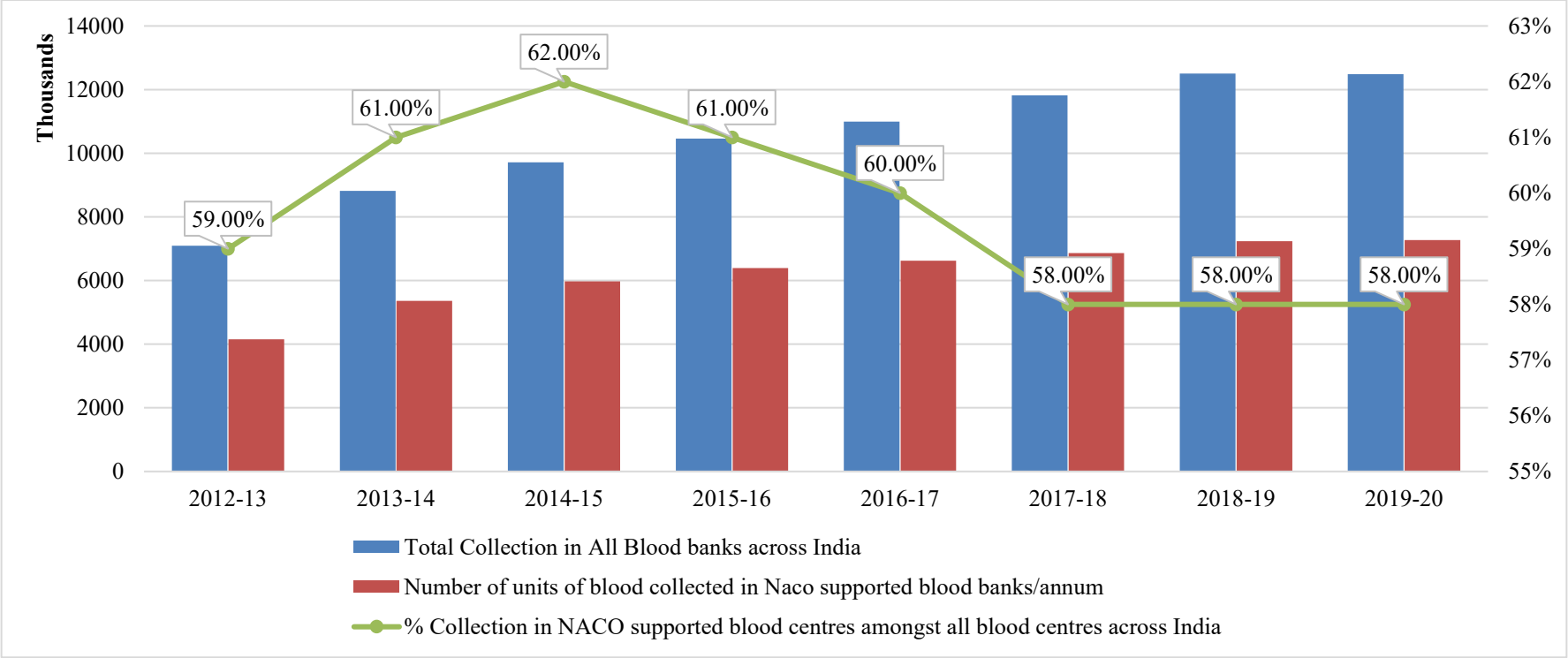
- Considering high demand, the lab services need to be upgraded quantitatively as well as qualitatively in term of equipment, facilities, staff remunerations, capacities, and competencies.
- Seamless integration of Lab services data with other OST, ART centre and ICTC Centres and other programs is required to fast processing and avoiding LFUs

Chapter 8 Blood Transfusion Services

Blood transfusion services (BTS) are an integral part of the health care system. BTS in India comprised of three thousand three hundred twenty-one (3,321) licensed blood banks in government, NGOs, private sectors, out of which one thousand one hundred and thirty-one (1,131) are NACO supported. As per the available data with NACO, more than fifty-five (55) percent of total blood collection in the country is from NACO supported blood banks. India collects 10% of global blood. In 2019-20, India collected 12.5 million blood units against an annual requirement of approximately thirteen (13) million units (WHO norm of 1% of the population). Around seventy-one (71) districts are still lacking blood banks. One of the main reasons for the same is that our health system is not sensitized and another reason is the creation of new districts. To ensure easy access to the safe, adequate, and good quality blood supply, GOI adopted the National Blood Policy in April 2002. The National NACP-IV and extension period (2012-2020) aims to strengthen access to blood and blood products through a well centrally coordinated network, and self-sufficient and efficient BTS. The key strategies envisaged in NACP-IV include:

1. Strengthening the management structure of BTS
2. Increasing regular voluntary non-remunerated blood donation
3. Promotion of component preparation, rational use of blood & capacity building of health care providers
4. Establishing quality management system including the rollout of EQAS
5. Streamlining implementation and referral linkages.

Since blood cannot be stored indefinitely, implying that constant donations are required to ensure the supply for those who need it. There has been an increase in the total collection of all blood banks across the country. From seventy (70) thousand in 2012-13, total blood collection in the country has been reached to 1.2 crores in 2019-2020, there has been an increase by one seventy (170) folds. Similarly, a gradual increase has been observed in the total number of blood units collected in NACO supported blood banks. From forty-one (41) lakh units in 2012-13, it has reached to seventy-two (72) lakh units in 2019-20, an increase of seventy-six (76) percent in such numbers, against the target of ninety (90) lakh units as shown in Table 7.1. But the overall percentage of the collection in NACO supported blood banks in the last 8 years i.e. has reduced from fifty-nine (59) percent in 2012-13 to fifty-eight (58) percent in 2019-20 as shown in Figure 8.1.



Source: NACO

Figure 8.1 Blood collection across all blood centres in India and blood collection in NACO supported blood bank

One of the major strategies for BTS adopted by NACO has been the promotion of non-remunerated voluntary blood donation. The gradual decrease has been observed in voluntary blood donation (VBD) from seventy-nine (79) percent in 2012-13 to seventy-six (76) percent in 2019-20 against the target of ninety (90) percent. One of the major probable reasons explained by the NACO team for this decline in the last two (2) years has been the change in the definition of a voluntary donor, as to exclude family donors. Also, the COVID pandemic has contributed to this decline in 2019-20. The number of blood componentization has gone up from fifty-one (51) percent in 2012-13 to seventy-nine (79) percent in 2019-20. Thus, overall seventy-nine (79) percent of blood has been subjected to componentization in NACO supported blood component separation units in 2019-20 against the target of eighty (80) percent. Also, Transfusion Transmissible Infection (TTI) reactivity in NACO supported blood centres for all infections inclusive (HIV, HBV, HCV, Syphilis, and Malaria) has been reduced from 2.12% in 2012-13 to 1.4% in 2019-20.

Table 8.1 NACP-IV BTS Targets Vs Achievement at National Level

Indicator	Target	Achievement							
		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Cumulative Number of Blood Banks	**1300**	1131	1131	1131	1131	1131	1131	1131	1131
Total number of Blood units Collected	**9000000**	4150540	5365698	5976764	6392730	6626863	6865722	7237841	7272174
Percentage of Voluntary Blood Donation	**90%**	79%	78%	78%	79%	77%	77%	76%	76%
Number of Blood units converted to Blood Components	**80%**	51%	57%	60%	64%	68%	72%	75%	79%
TTI Reactivity in NACO supported BB (HIV, HBV, HCV, Syphilis, Malaria)		2.12%	2.12%	1.81%	1.62%	1.57%	1.55%	1.50%	1.41%

Source: NACO

Since NACO has been responsible for ensuring the safe provision of blood in the country. With the strong network of one thousand one hundred and thirty-one (1,131) NACO blood centres including thirty-four (34) mobile blood centres, three hundred sixty even (367) blood component separation units, one hundred eighty-six (186) major blood centres and five hundred forty-four (544) district-level blood bank, thirty-two (32) bloodmobile vans for VBD, and two hundred fifty (250) refrigerated vans for regional blood transfusion centre NACO has been able to provide access to safe blood through its well-coordinated BTS. But there are still seventy-one (71) districts without blood bank and lack of sufficient manpower at the national level for the implementation of BTS services.

State-wise BTS targets and Achievement

UP

The achievement in terms of total collection for this state has not been able to reach the target after 2014-15. In the last 5 years, though there has been an increase in the total collection of blood, however, the target has not been achieved. But the target for the collection in NACO supported blood bank has been achieved in the last 8 years except for the years 2014-15 and 2015-16 as shown in Table 8.2. The percentage of component separation has been increased from fifty-one (51) percent in 2012-13 to eighty-two (82) percent in 2019-20 thereby achieving the target of 80 percent in the last two years.

Delhi

The total blood collection in this state has been gradually increasing from 5.3 lakh units in 2012-13 to 5.8 lakh units in 2018-19 after which it has been reduced to 5.7 lakh units in 2019-20 as shown in Table 8.3. There has not been much increase in the total collection of blood in NACO supported blood banks over the last 8 years. Percentage of the voluntary collection has been in a range of (fifty-five) 55- 58 (fifty-eight) percent during the NACP-IV and extension period thus, major work needs to be done to reach the national target of ninety (90) percent.

Table8.2 BTS Targets and Achievement in UPSACS

Sl. No	Key Indicators	2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		2019-20	
		Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1	**Total Collection in State**	**783672**	801788	**887550**	853131	**902339**	930058	**1080170**	953639	**1296204**	1019982	**1555445**	1165363	**1866534**	1253269	**2239841**	1365990
2	**Total Collection from NACO supported BB**	**376674**	416311	**443765**	455503	**488142**	465238	**541837**	482777	**450000**	544030	**450000**	581415	**450000**	605377	**450000**	647555
3	**VBD Collection**	**339007**	274017	**355012**	320311	**292885**	320199	**325102**	328957	**405000**	349955	**270000**	397348	**270000**	407868	**270000**	230722
4	**Component Separation in NACO supported blood centres**	**80%**	51%	**80%**	55%	**80%**	69%	**80%**	66%	**80%**	69%	**80%**	77%	**80%**	80%	**80%**	82

Table 8.3 BTS Progress and Achievement of DSACS

Year	Total Blood Collection	Total Voluntary Collection	No of Blood Camps held	Collection in NACO supported Blood Banks (20) & % of Voluntary Collection	Component Separation (NACO supported BB)
2012-13	533438	286929 (53.80%)	2198	300320 (56.30%)	79%
2013-14	520119	251772 (58.40%)	1356	298073 (57.30%)	75%
2014-15	539075	243076 (45.10%)	1622	297174 (55.10%)	79%
2015-16	549897	250298 (45.50%)	2292	306186 (55.70%)	78%
2016-17	546990	247219 (45.20%)	2514	303995 (55.60%)	78%
2017-18	550876	252714 (45.90%)	2419	315673 (57.30%)	80%
2018-19	585614	279856 (47.80%)	2449	341162 (58.30%)	78%
2019-20	571268	280588 (49.10%)	2286	325691 (57.00%)	80%

Karnataka

The total blood collection in the state has been increased from 3.3 lakh in 2012-13 to 4.3 lakh in 2019-20. Similarly, an increase in involuntarily blood donation has been observed over the last 8 years as shown in Table 8.4. Therefore, the national target of ninety (90) percent voluntary blood collection has been achieved in consecutive last three years.

Table 8.4 BTS Progress and Achievement of KSACS

Year	Total Blood Collection	VBD	% of VBD
2012-13	330344	250899	76
2013-14	373285	293538	79
2014-15	393778	328128	83
2015-16	362283	315190	87
2016-17	394044	345592	88
2017-18	416596	377756	91
2018-19	463191	440785	95
2019 -20	437252	418366	96

Maharashtra

In Maharashtra state, there is not much increase in the total collection over the last 8 years. But it is interesting to note that the national target of the percentage of VBD has been achieved in all these 8 years. From the 95.6 percent in 2012-13 percentage of VBD has reached to ninety-nine (99) percent in 2019-20 as shown in Table 8.5. The national target of blood component separation of eighty (80) percent has also been achieved in this state in 2019-20.

Table 8.5 BTS Progress and Achievement of MSACS

Year	Total Collection	VBD	VBD %	Blood Component %
2012-13	640189	612431	95.66	57.6
2013-14	616741	602368	97.67	64.16
2014-15	630523	618621	98.11	69.11
2015-16	643626	625387	97.17	70.79
2016-17	627944	613716	97.73	73.53
2017-18	622854	612876	98.4	75.47
2018-19	644531	636569	99	78.1
2019-20	655659	650488	**99.2**	80.35

Orissa

The total blood collection in the Orissa state has been increased from 3 lakh in 2012-13 to 3.8 lakh in 2019-20 whereas the percentage of voluntary blood donation has reduced from seventy-seven (77) percent in 2012-13 to seventy-four (74) percent as shown in Table 8.6. Blood component separation has increased from eighteen (18) percent in 2012-13 to thirty-two (32) percent in 2019-20, but still very far behind the national target of eighty (80) percent of blood component separation.

Table8.6 BTS Progress and Achievement of OSACS

Year	Total Blood Collection	Vol. Blood Collection	Voluntary in %	Total Camps Organized	Total Camp Collection	Blood Components Preparation in %
2012-13	304876	235999	77.41	2489	139428	18%
2013-14	307978	240174	77.98	2577	136040	19%
2014-15	398818	287807	72.16	2584	130947	18%
2015-16	391741	275456	70.32	2792	202281	18%
2016-17	384966	297739	77.34	3099	190950	21%
2017-18	392780	311233	79.24	3315	186635	24%
2018-19	391257	312481	79.87	3314	202003	24%
2019-20	381162	283258	74.31	3381	197681	32%

Manipur

The total blood collection in the Manipur state has been increased from three thousand four hundred and eighty-one (3481) in 2012-13 to twenty-five thousand five hundred and ninety-two (25592) in 2019-20. There has been an increase in total blood collection by seven (7) folds in the last 8 years. Also, there has been an increase of total blood collection in NACO supported blood banks by six (6) folds in the last 8 years. It is worth to note that Blood component separation national target i.e. eighty (80) percent has been met in almost all years of NACP-IV as shown in Table 8.7.

Table8.7 BTS Progress and Achievement of Manipur SACS

Year	Total Blood Collection in State	Total Blood Collection in NACO supported Blood Bank	Total Voluntary Collection in NACO Supported BB	Component Separation in NACO supported BB
2012-13	3481	3481	572	Not Applicable*
2013-14	3239	3239	986	Not Applicable*
2014-15	18367	18367	3581	99%
2015-16	20932	19043	3132	100%
2016-17	22602	20615	3441	97%
2017-18	21620	19741	4850	100%
2018-19	23257	21115	5493	100%
2019-20	25592	21821	6913	100%
* NACO Supported BCSU Not Available				

Issues and Challenges

- The multiplicity of control at the central level (NBTC Governance & Management Structure) is slowing up the decision-making process and hindering the growth and progress of the division.
- Frequent change in a leadership position and the high attrition rate is a major area of concern for BTS. Lack of sufficient manpower at National as well as State level for implementation of BTS resulting in non-achievement of targets at National as well as State level.
- Inequitable Distribution of Blood & Demand-Supply Gap across the nation against the WHO standards is another area of concern which needs to address immediately with Public, private, and community partnership models
- Achieving 100% True VBD both in public and private sector is an important area of concern. Joining hands with political parties and social/caste/community-based structures is an important way forward.
- Logistic challenges due to lack of CPAEX budget example in only one van for outreach activities in MMG Hospital, UPSACS should be addressed to fulfil the required gaps.

Chapter 9 Financial Management & Role of the Development Partners

National AIDS Control Programme (NACP) launched in the year 1992 as a Central Sponsored Scheme. It was granted a Central Sector Scheme from the year 2016-17. During the detailed discussion with the NACO officials, it was found that the Central Sector Scheme is better as funds transferred directly to implementing agencies so monitoring of the activities becomes easy. The phase of NACP-IV for the period 2012-2017 was approved with Gross Budgetary support of Rs. 11,394 crores and the continuation of NACP-IV have been approved from April 2017 to March 2020 with an outlay of Rs. 6,435 crores.

The trend analysis of budgeted revised estimates (RE) for the NACP-IV and extension period in Figure 9.1 shows a decreasing trend till 2015-16 and increases after it. In none of the year, the programme could spend annually budgeted funds except for the year 2016-17 where expenditure percent is almost a hundred (100) percent. The gap between budgeted and actual expenditure was the highest in the year 2012-13.

Table 9.1 represents component-wise allocation and utilisation of funds under AAP for last 5 years. Expenditure on TI division is the highest among all other programmes, followed by ICTC/BSD whereas less expenditure has been observed in on SIMU division, followed by LS and STI. During the discussion with the NACO officials, it was found that IEC funds have not been utilised appropriately as IEC funds have been kept as backup for the salaries of the human resources.

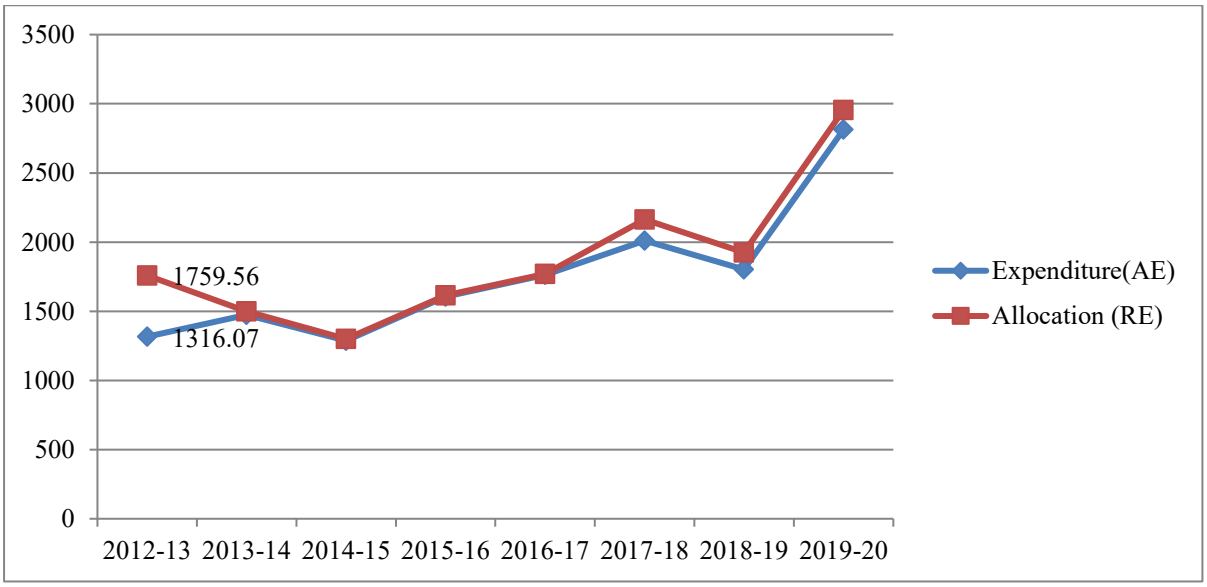


Figure 9.1 Total Revised estimate (RE) and actual expenditure (AE) for NACP-IV and extension (in crores)

Table 9.1 Component wise allocation and utilisation of funds under AAP for the last 5 years at National Level

Components	2015-16		2016-17		2017-18		2018-19		2019-20	
	Allocation	Utilisation	Allocation	Utilisation	Allocation	Utilisation	Allocation	Utilisation	Allocation	Utilisation
STI	2686.94	2228.16	2530.16	2382.03	2549.07	2279.39	2674.15	2482.92	2800.29	185.74
BTS	9181.02	5658.22	7043.84	5606.73	7080.75	4855.02	7418.57	5740.70	7106.18	1445.83
IEC	12229.61	4034.75	6543.47	3065.15	5592.54	2747.77	5866.13	3016.07	5000.00	2493.98
ICTC/BSD	21547.73	21267.91	21704.23	23684.33	21867.50	22954.91	23083.99	25245.35	33778.78	28517.82
LS	328.18	454.64	808.14	478.32	800.03	596.81	839.20	644.02	1250.00	429.49
CST	13365.57	10939.09	12077.44	12472.87	12168.25	12474.52	12764.03	13158.51	20656.69	15389.36
IS	8644.68	9816.86	5938.27	10174.77	6982.93	10263.75	7354.80	10707.94	12415.38	19182.12
SIMU	930.04	319.56	609.21	259.39	613.83	486.41	644.27	352.09	741.28	230.36
TI	30371.11	22353.87	30513.64	29344.34	30295.98	25066.25	31704.84	26132.83	32591.00	26206.18
LWS	3527.38	1951.47	3544.78	3211.32	3568.53	2732.58	3486.41	2797.89	3534.40	2954.04
Total	**102812.26**	**79024.53**	**91313.18**	**90679.25**	**91519.41**	**84457.41**	**95836.39**	**90278.32**	**119874.00**	**97034.92**

Source: NACO

Table 9.2 Year-wise actual allocation and actual expenditure for SACAs (in Rs lakh)

	Delhi			Maharashtra		Manipur			Orissa		UP			Karnataka		
	Sanctioned Budget	GIA received	Utilization	Budget allocated	Utilization	Approved AAP	Funds received	Utilization	GIA approved in AAP	Utilization	Approved AAP	Actual Allocation	Utilization	Approved	Grant Received	Utilization
2012-13	3421.88	3302.2	2201.57	8457.43	7168.04	2,775.29	2,861.77	2,673.44	3041.33	2458.15	4804.91	3389.44	3602.33	7592.26	6501.3	6739.23
2013-14	3130.19	2185.13	2755.49	11988.4	11576.77	2,853.86	2,428.06	2,148.11	3695.95	2388.32	6476.3	3578.7	4058.4	8374.39	5186.67	7112.13
2014-15	4408.09	3126.66	2824.67	13091.31	10638.18	3,034.74	*2,318.41	2,581.09	4217.08	2877.55	8896.28	5225.33	5319.62	9726.85	9098.93	8273.37
2015-16	3598.49	3005.36	2255.35	10409.23	9267.88	2,651.05	*2,057.22	1,787.95	3469.9	2713.91	7117.02	5709.4	5237.48	7781.48	5901.24	6482.48
2016-17	3375.31	3806.12	3625.11	9509.55	8910.59	2,222.90	3,261.65	3,193.73	2959	3014.95	6170	6170	6074.51	6997.84	6983.89	7335.2
2017-18	3342.27	3154.04	2888.13	9968.83	8873.3	2,580.43	2,724.83	2,505.93	3011.73	2831.54	6105	5979	5605	7066.99	6585.56	6719.51
2018-19	3651.91	3646.9	2906.64	10250.58	10031.16	2,667.58	3,110.64	2,288.29	3197.98	2938.2	6021	6011	5784	7512.92	7507.9	7926.73
2019-20	4175.75	4175.75	3071.91	11900.49	10181.55	3,063.83	3,720.93	2,772.96	4150.54	2703.71	7909	7909	6803	9673.78	9673.77	7641.07

*In Manipur * Rs. 201.35 (in lakh) was borrowed from State GIA in the FY. 2014-15 and the same has been refunded in the FY 2015-16.

Role of the Development Partners

The partner and donor's involvement and participation in strengthening the national programme are crucial, and the collaboration brings evidence to the programme with new initiatives. One of the strengths of the NACP and its extension phase is it has been an active and engaging partnership with our development partners such as USAID, CDC, UNAIDS, WHO, The World Bank and The Global Fund in addressing HIV/AIDS by contributing their technical expertise and financial resources.

The President's Emergency Plan for AIDS Relief (PEPFAR)-USAID & CDC

PEPFAR has been a valued partner in the fight against HIV/AIDS in India since 2003. PEPFAR India focused on providing technical support along with the prevention to care and treatment continuum. PEPFAR works closely with the Government of India at both the national level, providing technical assistance for the NACP, as well as at the state level, providing technical assistance under the Cluster Strategy. PEPFAR in collaboration with NACO aimed at catalysing progress towards epidemic control through different strategies viz., reach test and treat undiagnosed; strengthen laboratory capacity; increase data analysis & use. Programme focus areas included Lab for life; Sunrise project in North East; Project Accelerate in cluster districts, Care, Support & Treatment; HIV-TB/ Lab, Strategic Information; HIV counselling & testing; Key Populations; Orphans & Vulnerable Children; TB in the private sector; innovative financing and Stigma & Discrimination.

National AID Control Support Project (NACSP) supported by the World Bank

The National AIDS Control Support Project (NACSP) is a World Bank financed project that is being implemented by the National AIDS Control Organisation, MoHFW, GoI from July 22, 2013, with a total funding outlay of Rs. 2,550 crores (on 50:50 sharing basis between The World Bank and GoI) at extant exchange rates. The initial closing date of the project was 31.12.2017 which has been extended till June 2020 with the restructuring of the project.

In the NACSP, The World Bank supports NACO under three components:

1. Component 1: Scaling up of targeted prevention interventions for people belonging to high-risk groups (HRG)
2. Component 2: Information Education and Communication (IEC)

3. Component 3: Institutional Strengthening

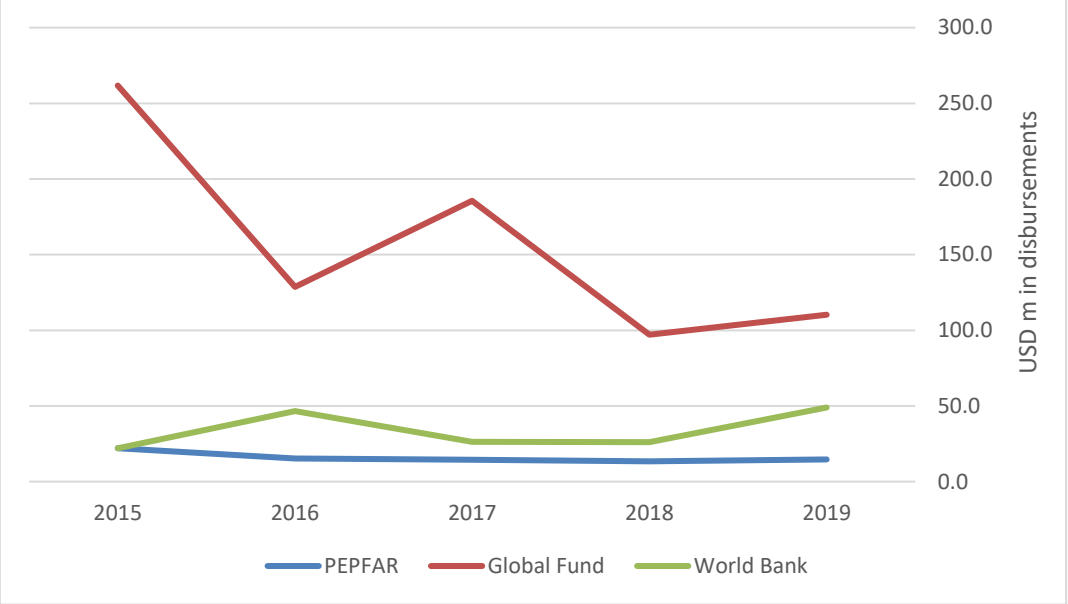


Figure 9.2: Disbursements by Main HIV Development Partners to India's HIV response (data is for all years for which disbursement data from PEPFAR, the GF and the World Bank project were available)
Sources: Data for this graph from US Government PEPFAR program (2020)[1] and The Global Fund (2020)[2]

As part of monitoring the progress of NACP, the World Bank conducts bi-annual "Joint Implementation Review Mission (JIRM)" consisting of multi and bilateral partners. Last JIRM was conducted from July 15 to August 2, 2019. The team visited Haryana and Mizoram states and shared their inputs with the respective SACS and NACO team. The World Bank team also carried out a Technical Mission from 17th – 18th October 2019.

SAHAS: Global Fund Grant (2018-2021)

The Department of Economic Affairs, Ministry of Finance of India is the recipient of Global Fund Grant (2018-2021) with the National AIDS Control Organization as the lead implementer. NACO has been allocated a budget of USD 102.6 million and non-Government PRs have been allocated USD 52.7 million for the grant period. In this grant, various programmatic activities have been budgeted with a vision to move towards fast track targets of 90-90-90 by 2020 and as its commitment to the end of AIDS as a public health threat by 2030. The grant has been allocated to the HIV Programme for the following activities:

[1] https://data.pepfar.gov/
[2] https://data.theglobalfund.org/investments/location/IND#investments

- **National Programme Management Unit:** A National Programme Management Unit (NPMU) has been formed in NACO from July 2019 for review and management of Global Fund grant. The four-member NPMU consists of Grant Program Manager, Finance Manager, Monitoring and Evaluation Manager and Grant Coordinator.
- **Prevention of Parent to Child Transmission of HIV (PPTCT)-** HIV testing is being offered to every pregnant woman (universal coverage) through more than 30,000 PPTCT centres to identify all estimated HIV positive pregnant women and eliminate transmission of HIV from mother-to-child. Around 118.4 Lakhs pregnant women were tested for HIV(April-Sep), and total 8,949 HIV positive cases were reported, out of which, 85% were initiated lifelong ART. Around 6,165 HIV exposed live births were reported, out of which 5,358 babies were received ARV prophylaxis.
- **Procurement Refurbishment of ICTCs and for community-based testing** – The activities have been such formulated to work towards goals of first 90 and Scale-up of HIV testing in key geographies and populations. The grant is being utilized for procurement of Ice lined refrigerators, walk-in coolers, replacement of old equipment (Refrigerator, Computer & accessories, Printer, Centrifuge machine etc), minor refurbishment for Converting F -ICTC into ICTC and procurement of refrigerators for TI for implementing CBS, Cold chain Carrier for VHND level screening in a decentralized manner for 37 States/UTs in India.
- **Procurement ARV drugs**: Technical Resource Group for adult treatment has recommended the use of Dolutegravir (**DTG**) as the alternate first line, second line & third-line drug to replace existing ARVs with DTG. The Global Fund grant is being utilized for the procurement of TLD and DTG.
- **Supply Chain Management**- The Global Fund grant is being utilized to strengthen the supply chain system across the country for ARV drugs and HIV testing kits. The initiative has transported 119081 ARV drug boxes to ARTC across the country, helped in 2002 relocation of ARV drugs and supplied 211951 HIV testing kits to ICTC across the country.
- **Lab services**: NACO is in the process of expanding VL testing facilities for routine viral load monitoring which will be a key element towards measuring third 90. To put his system in place NACO has procured 64 viral load machines, which has been installed but 36 labs are fully functional till now and global fund grant has been utilized for the dedicated staff of 1 Technical Officer and 1 Lab technician for all 64 VL lab.

More than 5.20 lakh viral load tests have been performed through public and outsourced facilities.

- **Differentiated Care Centres**: Activity is being implemented in a phased manner for starting 100 ART centres. Funds have been allocated to SACS for implementation of 50 centres in the FY 2019-20.
- **Capacity Building:** The training of ANM & Staff nurses on HIV & Syphilis screening of pregnant women has started in December 2018 and so far ANM training for 5366 Facilities in 19 State/UTs (285 Batches) has been completed. Counsellors contact training has been rolled out from September 2019 and by end of October 242 Counsellor have been trained in 8 batches.
- **Project SOCH** (strengthening overall care for HIV) was conceived to create a completely digital system for all processes under the HIV continuum of care. Using Global Fund grant an integrated single digital platform has been created to ensure that all information will digitally flow from TI/OST centres to ICTCs and finally to ART centres, automating all monitoring and evaluation activities at the national, state and facility level. More than 700 counsellors including DAPCU and M& E personnel from 30 SACS have been trained on SOCH platform.

Other Development Partners

With involvements of members from various developmental partners like UNAIDS, USAID, WHO, CDC and various national and regional institutes NACO has formulated various Technical Resource Groups (TRGs). This TRGs technically advice NACO time to time for various issues like Epidemic Monitoring, 'Surveillance and Estimation', 'Paediatric and Adult Health', and 'Capacity Building' etc.

Technical and Financial Efficiency of NACP

Due to several technical strategic interventions during NACP IV has been able to showcase higher than global standards technical and financial efficiency (See table 9.3). Table 9.3 compares the unit costs of major HIV commodities under NACP IV to global reference prices. For the five HIV-related commodities for which they were available, India's unit costs were lower than or within the range of the global reference prices.

Table 9.3: HIV Commodity Unit Cost Comparisons

HIV Commodity	Unit	NACP IV (average) [US$]	Global reference price [US$]
Condoms	Per condom	0.02	0.09[3]
HIV test kits	Per test kit	0.2	0.3 - 0.5[4]
ARV drugs	Per tablet	0.14	0.17 – 0.19[5]
First-line ART	Per year	59.00	62- 68[27]
Second-line ART	Per year	242.00	224-268[27]
OST	Per 2mg tablet	0.05	Reference price not available

Source: NACO financial analysis (2020); Global Fund Price and Quality Reporting System (2020)

The unit costs to reach the project's targeted populations (HRGs and bridge populations) were mostly consistent over time, showed modest increases in newer program areas, and was much lower than global reference prices (Table 9.4).

Table 9.4: Cost per Person Reached (per annum) and Cost per Visit (Direct Cost for Prevention Services only)

HRG / Bridge population	**Cost / Year/ HRG or per bridge population reached with TI [US$]**			Global reference price **[US$]**
	FY 2017-18	**FY 2018-19**	**FY 2019-20**	
FSW	21.8	23.3	20.0	65.0[6]
MSM	18.8	23.8	21.2	74.0[28]
TG /Hijra	28.0	29.7	29.4	No comparative data
PWID	40.8	48.7	52.7	80.0[28]
Migrants	1.9	1.6	1.8	No comparative data
Truckers	1.5	1.5	1.6	No comparative data
Link Workers Scheme	2.3	2.6	2.4	No comparative data

Source: NACO financial analysis (2020) **Notes**: For FSW, MSM, TG, and PWID: estimated reached by TI once per month. For truckers and immigrants, estimated reached by TI one per year.

Over and above a focus on efficiency, setting defined performance criteria have also been instrumental in ensuring consistent quality (and therefore optimized efficiency). Also, the institutional strengthening activities focusing on both technical and managerial aspects of NACO, SACSs, DACPUs, and NGOs/CBOs, maximum engagement of the community in various interventions have contributed to the smooth implementation and improved quality of TI activities, and an efficient procurement process. This is evident in that fewer contractual issues were reported, and fewer TI implementers were disqualified (2-5%) than in previous rounds. There were also cost savings on the client's side. Decentralized ART-linked centres

[3] The Global Health Cost Consortium
[4] https://www.theglobalfund.org/media/7564/psm_hivrdtreferencepricing_table_en.pdf?u=637319005428530000
[5] https://www.theglobalfund.org/media/5813/ppm_arvreferencepricing_table_en.pdf?u=637384507675200000
[6] Estimates (average, global) made by Avenir Health for UNAIDS projections, 2020

incorporated to CBOs and NGOs to serve stable ART clients reduced the client's travel and time costs, lowered salary paid to health care workers, and lowered operation costs. The loss to follow up of PLHIV on HIV treatment decreased over time because of innovations that were implemented under the Project. These would likely have reduced the unit cost per person retained in ART (a key cost-effectiveness outcome).

Issues and Challenges

- **Reducing Budget:** A gradual decrease in the budget for the scheme is seen as a major challenge. The population has increased over a while, along with the patients. However, with the decreasing budget over time has made the job difficult to cover the larger population.
- **Swapping of Budget across Different Heads:** Due to the fact of the gradual decrease in the budget, to accommodate the pressing issues, the budget from different heads are being allotted to those areas, which requires immediate attention. The swapping of the budget becomes a challenge to strategize the scheme, making it unviable.
- Delay in Submission of Utilizations Certificate and Audit Annual Reports from SACS lead to delay in the release of funds. There is a need to ensure the UCs are submitted in proper time and feedback given if there are any gaps and issues. Any issues raised in the audit report should be recorded and ATR submitted, and engagement of third-party auditors should be ensured.
- Routing of Funds through State treasury caused delays in fund transfer, although this was resolved that caused almost a disruption of almost two years. These fund flow mechanisms should be better tracked, and any issues of underspend should be quickly resolved.
- Internal fund allocation and utilization should be analyzed further and periodically to ensure there are no glitches, lapses and gaps which can lead to issues and challenges later.
- The contribution of various development partners remained either constant or reduced over the project period. These donors contributed to specific aspects of the program, with the US Government PEPFAR program focusing, from a program perspective, on the TAsP program: "Reach, test, and treat undiagnosed cases among KPs in high priority sub-national units."

Chapter 10 Strategic Information Management and IT Divisions

NACP IV transitions the National AIDS response from the era of Millennium Development Goal (halting and reversing of the HIV/AIDS Epidemic) 2000-2015 to an era of sustainable development goals (end of AIDS) 2015-2030. Table 10.1 provides the snapshot of 90-90-90 Fast Track Targets progress and the current status at National and State Level. Seventy-six (76) percent of people living with HIV know their status at the National level whereas among states Maharashtra is leading followed by Karnataka in terms of the number of people living with HIV knows their HIV status. Eighty-four (84) percent of people with diagnosed HIV are on ART and more than eighty (80) percent people receiving ART have viral suppression at the National Level.

- 90% of all people living with HIV will know their HIV status
- 90% of all people with diagnosed HIV are on antiretroviral therapy
- 90% of all people receiving antiretroviral therapy will have viral suppression

Table10.1 90-90-90 Fast Track Targets progress & current status at National and State Level

Target	Achievement						
	National	Karnataka	Maharashtra	Manipur	Orissa	Delhi	UP
First 90	76%	85.4%	100%	47.2%	68%	100%	79%
Second 90	84%	80.8%	75%	89%	76%	69%	82%
Third 90	>80%	69%	87%	93%	84%	74%	82%

Major information systems of NACO are SIMS (Strategic Information Management System), PALS (PLHIV ART Linkage System), IMS (Inventory Management System) and Excel Based Analytical Tool for Core Group at NGOTI level. Among all, SIMS is the backbone of the programme monitoring and its reporting is mostly 80% or more across the components.

SIMS is an integrated web-based reporting and data management system launched in 2008 to strengthen the monitoring and evaluation system at each level. The key component of strategic information has been the programme monitoring, research, data analysis and dissemination. It also includes information technology, overall capacity building and coordination with different NACO divisions for regular reports. SIMS has made real-time data entry and access to users

and the latest data report which is available helps the programme managers and policymakers to take corrective measures and also helps in monitoring at grass-root level.

Surveillance

In the view to strengthen the surveillance, the following activities have been implemented during NACP-IV and extension period -

- ANC HIV Sentinel Surveillance (HSS) (4 rounds)
- Integrated Bio-Behavioural Surveillance Survey in 2014-15
- High-Risk Group (HRG) HSS in 2017
- Behavioural Surveillance Survey-Lite in 2019-20
- HSS Plus among inmates in Central Prison Sites (2019)
- Three rounds of HIV Estimates
- District Level: EMTCT need; prioritization
- Two rounds of Expert Consultation
- Six rounds of TRG

Publication of the national report in a record time is only possible because of the Real-Time Monitoring & Data Management System. Individual ART HIV sentinel surveillance TI (weekly), ICTC, TI- daily application, procurement application and TI-TG monthly format are some of the components which were planned but have not been implemented in SIMS.

Data Analysis and Dissemination

One of the major achievements towards reaching the goals of NACP-IV has been the setting up of Data analysis and dissemination unit (DADU) at NACO. To make the best use of available data and to address the evidence gaps in the programme, the NACO has initiated National Data Analysis Plan (NDAP). The NDAP is an effort to analyze the huge amount of data generated under the programme, to develop analytic documents, scientific papers, journal articles, etc. for publication and wider dissemination. National Technical report on NDAP-I is published whereas the National technical report on NDAP-II is under finalisation. Also, round III of NDAP is planned in FY 2020-21. To streamline the data access and sharing, to use a common protocol at all level, NACP Data Management Guideline, 2020 has been drafted by incorporating both data sharing and protection guidelines.

Research and Evaluation

In the National AIDS Control Programme, research is the essential component under Strategic

Information Management. All the research outputs have been translated into programmatic actions and policy formation by the NACO. The research mandate under NACP-IV and extension period included preparation of the plan for HIV/AIDS research nationally, coordinating, promoting research and supporting capacity building on HIV/AIDS, through network and partnership with multiple stakeholders. Thus, act as a central repository for relevant research documents and database on HIV/AIDS in the country.

Various studies were initiated and completed during the last 8 years to generate evidence through operational research on critical gaps in programme implementation. The division also started a new initiative ie. Brown Bag Seminar Series to build capacities and knowledge of all the programme managers at SACS, NACO civil society and community, academicians and scientists, development partners and other key stakeholders. This has been resulting in cross-learning on new-developments, programme management and ultimately strengthening NACO's research agenda.

NACO has initiated the Internship Programme in 2018 for young students to get familiar with and understand the various dimensions of policy-making & implementation of the (NACP).

Information Technology

One of the major achievements of this division has been the development of SOCH application. Under the minimum viable product (SOCH) development and implementation, the functionality of existing systems like PALS, EID and IMS have been linked along with reusable API based linkages with external systems like-CMSS, e-aushadi and private viral load. This will help in integrating the different database and enable beneficiary tracking across HIV continuum. Also, it will help NACO in preparing and training the end users for SOCH and the feedback from users helped them in improving on SOCH functionality. Besides, all the systems will be using the same database. Apart from SOCH, various work has been done since the establishment of NACO IT division like the transition of PALS application from VHS to NACO, development of BCT-LMS application and further hosting it on NIC Meghraj cloud server, NACO official website transition from NIC CMF teams to NACO, and setting up of video conferencing at NACO etc.

Chapter 11 Input and Output Analysis & Recommendations

Input-Output Analysis

As a step of the analysis of the inputs and the outputs, the major indicator of NACP IV is the number of testing done during the last eight years. As the number of facilities is one of the significant components which has a contribution to the number of testing done for the last eight years, the relationship between both the variable were analyzed and studied.

Basic Service Division Input-Output Analysis

The SPSS output given in table 11.1 shows, that a minor increase in the number of facilities will have a major significant change in the average number of testing done. However, the emphasis should be on increasing the number of facilities, rather than enhancing the capacity of the existing ones. It is needless to state, the number of personnel (HE) and the financial budget needs to be augmented to increase the number of testing done. This suggestion is based on the regression analysis, which was found to be statistically significant at 5% level.

Table 11.1 Regression Coefficients No. of Facilities VS No. of test Done

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-6021095.481	1383125.660		-4.353	.005		
FACILITIES	1834.153	59.800	.997	30.671	.000	1.000	1.000

a. Dependent Variable: TESTING DONE

ICTC Treatment Expenditure Vs Patient Counselled

Analysis of ICTC treatment expenditure and no. of patient treated shows that every rupee one invested in ICTC treatment contribute almost two patients get counselling service (See Table 11.2). The model calculated for this is not just statistically significant at 5% level but also has a very high coefficient of determination i.e. 0.86, shows the robustness of the model.

Table 11.2 Regression Coefficients ICTC Treatment Expenditure Vs Patient Treated

Regression Statistics	
Multiple R	0.929925
R Square	0.864761
Adjusted R Square	0.819681
Standard Error	2362.112
Observations	5

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-19828.4	10536.97	-1.8818	0.156417	-53361.8	13704.9
X Variable 1	1.88697	0.430832	4.379831	0.022032	0.515871	3.258069

CST Expenditure VS. Number of People Provided ART Treatment

Analysis of CST expenditure and no. of the patient provided with treated shows that every Rs. One lakh Rupees spent on ART treatment contribute to treat almost 100 patients (See Table 11.3). The model calculated for this is not just statistically significant at 5% level but also has a remarkably high coefficient of determination i.e., 0.81, shows the robustness of the model.

Table11.3 Regression Coefficients CST Expenditure VS. Number of People Provided ART Treatment

Regression Statistics	
Multiple R	0.903317
R Square	0.815981
Adjusted R Square	0.754641
Standard Error	88423.17
Observations	5

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-111269	354348	-0.31401	0.774083	-1238962	1016425
X Variable 1	99.66221	27.32507	3.647282	0.03556	12.70165	186.6228

Recommendations and Way Forward

The NACP-IV and its extension phase have accelerated, adapted and consolidated its strategic response to the programme needs and requirements as per changing socio-political environment. To achieve the global commitments of eliminating HIV/AIDS by 2030 in Sustainable Development Goals, NACO has developed a National Strategic Plan for HIV/AIDS and STI (2017–2024) with a wide range of stakeholders involved in the national response. It spells out the objectives and targets that NACP have jointly committed to achieving with development partners. The plan describes the strategies and activities that will need to be implemented on the ground across India's 37 States and Union Territories with the help of AIDS Control Societies, District AIDS Prevention and Control Units, Regional Institutes, communities, development partners and the private sector. Based on learning from the performance, achievement as well as from the issues, challenges, gaps, and future requirements mentioned above the following recommendations are suggested for the next phase of the National AIDS Control Programme.

Overall Strategic Thrust and Leadership and management support

- The NACP approach which has worked well so far, there needs to be a paradigm shift towards scaling up efforts under the programme to achieve the Sustainable Development Target of “End of AIDS by 2030”.
- This requires focused prioritization, reorganization, resource optimization, building capacities and leveraging partnerships, to consolidate the gains and move steadily forward towards the last mile and achieve the desired targets and impact.
- Top leadership and management team at NACO and SACS have been very articulate and supportive during these changing times of the 8 years in the NACP-IV and extension period. Strong leadership and management team is required to run such as large scale and complex program and Policymakers should continue to support these efforts by keeping the strong and supportive leadership and management team at HQ and States.
- An assessment of Indian context concerning the latest global fast track targets especially in the COVID-19 scenario shows that reaching the targets is challenging, but achievable, with focused and reinvigorated efforts to address the critical bottlenecks and ensure rapid implementation of last-mile strategies in the coming years with the strong leadership and management team and professional staff down the line.

Unique Vertical Nature of the Program Design

- Considering the uniqueness of HIV/ AIDS on one end as a manageable chronic disease requiring life-long medication; and on the other end the stigma and discrimination attached with the infection and those infected, it requires a different approach than the general health system. NACP is a vertical programme would do more justice to meeting the service requirement of marginalized communities and people living with HIV/AIDS, who might find it exceedingly difficult to access services from the mainstream. Integration and mainstreaming with General health system efforts should continue to be explored and piloted for the long-term strategy.
- Considering the cross-cutting nature of engagements with different stakeholders within the program and outside the health system and Departments/Ministries vertical nature of the program with a centralized focus on HIV prevention control and treatment is must ensure the end of the pandemic in the targeted time-period.

Strengthening State Leadership

- NACO should continue and emphasize on building State leadership with design and implementation tailored to changing programme needs to ensure quality and desired outcomes. Clear time-bound performance and accountability matrices should be developed for State-level programme planning, implementation and achievements.
- Against the backdrop of changing HIV epidemic scenario and expansion of services delivery approaches, the presence of District AIDS Prevention and Control Units (DAPCUs) can be leveraged to monitor the HIV programme across priority districts.
- DAPCU led single-window model in all DAPCU districts should be further strengthened and streamlined. Specific guidelines and measurement matrices for the same should be developed and ensured compliance.

HIV Testing and Counselling requires renewed Updation and Reskilling

- HIV testing continues to be linked to mandatory counselling, confidentiality, informed consent, and an individualized linkage of those tested positive to treatment services. This needs a dedicated, trained and skilled workforce to be recruited and retained in the programme.
- Further, capacity building needs to be continuously undertaken for programme management and service delivery staffs to keep them always updated.

Smooth Convergence and Leveraging Synergy with Partners & Resource Optimization

- NACO should leverage synergy and resource optimization with related schemes and programmes under the health systems and ensure smooth convergence. Matrices and process should be developed to measure the convergence and partnership efforts to be captured in the SI framework.
- However, efforts must be ongoing to explore and identify as well as develop network partners within and outside health system like the ministry of skill development entrepreneurship, Fit India Initiatives, Ministry of Social Justice etc.
- Model of Uttar Pradesh SACS in collaboration with State Prisons Department (SPD) for Prison welfare without any external support has the potential to be replicated in other States.

ART and STI/RTI Services Quality, Retention and Adherence

- ART programme has been expanding in NACP-IV with more PLHIV being put on treatment. Adherence and retention would need to be focused on. Interventions on differentiated service delivery models, advanced disease management, death audit, verbal autopsy need to be adopted for better patient management and improving service delivery.
- The focus on STI/RTI programme needs to be strengthened. Models to reach out to at-risk populations, STI clinic attendees with a comprehensive service package to be piloted and adopted in the national programme.

Evidence-based IEC/BCC/SBCC Strategy Development, Tracking and Evaluation

- IEC, Mainstreaming, AEP and youth strategies need to build new evidence-based strategy development responding to the new dimensions and aspects that are emerging in the ecosystem as well as the program design at different levels. This will be required formative research and analysis which should be done at the earliest.
- The SACS should be encouraged to develop state-level Communication strategies based on formative research/CNA. These strategies should be the basis for IEC programme design as well as develop quantitative and qualitative SMART indicators

and tracking and reporting formats which should be analyzed and disseminated widely and shared on social media and online platforms.

Review Policies, Guidelines and Strategies for better implementation designs

- Policies, guidelines and strategies need to be reviewed and updated to ensure the reduction in implementation time, cost and fast response for integration.
- Revisions in Policies, guidelines, strategies should be worked out faster and sharing and dissemination to all SACS and other partners should be ensured in local languages and for different segments of targeted audiences.

Robust Strategic Intelligence and Management Unit

- 'Strategic Unit' needs to be established at NACO to focus on programme management such as partner management, consolidate field intelligence, strengthen community engagement. This unit will aim to mainstream efforts in a coordinated synergized manner at each level.
- Evidence driven planning and implementation under NACP with a complementary and robust Strategic Information system shall be further enhanced and expanded to generate, analyze and disseminate high-quality action-oriented evidence.
- The IT-enabled Artificial Intelligence-based client-centric management system should be made operational to for tailored service delivery, IEC activities, programme management and monitoring, and avoid data duplication.

Rework HR Policies and Update Market Competitiveness

- Considering cross-cutting specialization and work required Human Resource Department should rework its policy and work towards matching staff requirement and salary/remunerations to attract and retain better talent to make a big difference and less vacant positions and attrition.
- Ensuring filling of vacancies with appropriate measures and proactive follow up as well as competitive compensation packages as well as other incentives, perks and benefits should be explored.

TA and Development Partners Engagement and Contribution

- Partnership and Technical Assistance coordinated engagement and response mechanisms should be developed to contribute to the improved quality and efficiency of the program without being over-dependent but ensuring the actions and learning are integrated at scale.
- A robust platform and mechanism should be developed for TA Partners and Development partners so that their engagement and contribution is streamlined and tailored and utilised in a leveraged manner and tracked and measured and any delays or overlaps are minimised and quality outputs and response time is made more efficient and agile.
- For effective community mobilization or crisis management in TIs, the potential of community participation and engagement strategy should be optimized by using community systems strengthening (CSS) approach in the next phase of NACP.

Understanding COVID -19 Implications on the Program in the Long Run

- A specific policy element to understand and address how COVID will affect the short to medium term HIV/AIDS scenario and impact should be developed on priority.

Conclusion

NACO and NACP-IV (2012-2017) and extension phase (2017-2020) has done a commendable job of the task at hand and performed very well despite a series of significant transitions, trials, and turbulences. The unique strengths that contributed to the success of NACP in India include prevention-focused policies, evidence-driven strategies, community-centric approaches, constant innovations, dynamic multi-stakeholder response, openness for innovation and country stewardship.

NACP-IV and the extension phase largely achieved the goals and targets set out (90:90:90) at the initiation of NACP-IV and revised in the extension phase despite significant changes and challenges in the programme period. The achievement of these targets varied widely.

The leadership, management and governance of NACP-IV and its extension phase has responded and adapted well to the changing environment and needs and requirement of the

constituents' and stakeholders including community and partners. The output and outcomes of the programme can be further better achieved by converting weakness into opportunities by incorporating the above-mentioned recommendations.

Annexure-1 - In-depth Interview Guide for TSUs

Indian Institute of Public Administration, New Delhi
In-depth Interview Guide for TSUs

1. Name of the TSU Partner_____
2. TSU partner in Current state since_____
3. Who is responsible for hiring your TSU Services: NACO HQ/ SACS/ Development Partner?
4. Name of the TSU partner(s) before your organization in the state:_____
5. What is the Key Mandate and areas of functioning of the TSU?
6. Do you offer TSU services to some other States as well? If yes, Name_____
7. What is our TSU programme staff structure/organogram? Roles and responsibilities?
8. How do you coordinate your functioning with key stakeholders NACO HQ/ TIs/SACS/Development Partners/DAPCU?
9. Please share your Annual Work/Action Plan (AAP)/Annual Report for current and last years? With targets and achievement?
10. Have you applied/implemented TI Revamp strategy? If yes, how?
11. What have been the changes/challenges/improvements because of the revamp strategy?
12. Have you applied the new revised TI costing guidelines? Any Funds/Budget challenges? Fund flow?
13. What have been the changes/challenges/improvements because of the revised Costing guidelines?
14. Have you applied/implemented size estimation/Mapping exercise for TIs?
15. What have been the changes/challenges/improvements because of the revised size estimation?
16. When was it last done? What were the key changes from the previous estimation?
17. What is your Capacity building plans/strategy? What kind of support do you get from SACS/NACO?

18. What is your IEC strategy? What kind of support do you get from SACS/ DAPCU/ NACO HQ?
19. What is your review/reporting mechanisms with SACS/NACO? Please share reports.
20. Any HR issues internally? Attrition? Salary issues? PEs/ORWs?
21. What are the emerging challenges do you see in the TI program? In specific TI type- FSW, IDU, MSM, TG, Migrants, Truckers?
22. Any innovations in the design and implementation of TIs?
23. Do you support any other NACP components? If yes, which activity or component and how?
24. Please share your internal and external evaluation report?
25. Any significant issues raised in Evaluation/review and how were they addressed?
26. Any case studies, success stories, lessons learned? Pl share.
27. What is the process of Audit? Audit objections? Action taken report, if any?
28. What kind of Technical support/Expertise do you get from your Organization HQ? Elaborate?
29. Any Covid 19 related challenges? Solutions, Response? Pilots?
30. Do you think NACP still need the TI programme? Why? Why Not?

Annexure-2- In-depth Discussion Guide for Development Partners

Indian Institute of Public Administration

Evaluation of National AIDS Control Program IV

In-depth Interaction Guide for Development Partners

1. What kind of support did you provide to NACO? Which activity or component and how? What is the quantum of your support? How do you monitor the progress? Have there been any challenges in fund management and utilization? Has the funding increased or decreased during this period? Why? Any reports? Assessments? Evaluations? Annual progress reports? Any Targets/goals/IRs?
2. How do you coordinate your functioning with NACO HQ? is there a committee/forum of development partners with NACO? Among Development Partners? How would you rate your experience of working with NACO during NACP-IV? Policy? Management? Leadership? Operations? Quality? Technology? Accessibility? Partnership?
3. Do you also support SACS or other NGOs/CBOs /institutions direction for HIV/AIDS/TB/PPTCT related interventions? Please specify?
4. Kindly share any case studies, success stories, and lessons learned, other documentation, films, blogs, web posts?
5. Any Covid 19 related challenges? Solutions or Response.
6. Any suggestions for the future phase?

Annexure 3- List of Participants in the National Consultation Workshop

List of Participants
IDI with Development& Implementation Partners (November 10, 2020)

S.N.	Name of organisation	Participant
	DEVELOPMENT PARTNERS	
1.	UNAIDS	Dr. Bilali Camara
2.	UNAIDS	Ms. Nandini Kapoor Dhingra
3.	UNDP	Dr. Chiranjeev Bhattacharjya
4.	UNODC	Dr. Ajay Prakash
5.	USAID	Dr. Sangeeta Kaul
6.	CDC	Dr. Melissa Nyendak
7.		Dr. Reshu Agarwal
8.	WHO	Dr. Alexandra Vokaty
9.		Dr. Vimlesh Purohit
10.		Dr. Rajat Adhikary
11.	The World Bank	Dr. Suresh Mohammad
12.	The Global Fund	Ms. Bertha Simwaka
	IMPLEMENTING PARTNERS	
13.	FHI360	Dr. Bitra George
14.	Johns Hopkins University	Dr. Sunil Suhas Solomon
15.		Mr. Aditya Singh
16.	I-TECH	Dr. Anwar Parvez
17.	SHARE INDIA	Dr. Sunita Upadhyay from CDC
18.		Dr. Ramesh Allam from CDC
19.	PHFI	Dr. Preeti Kumar
20.	India HIV/AIDS Alliance	Dr. Rita Prasad
21.	Plan India	Ms. Rochana Mitra

22.	SAATHII	Dr. Sai Subhashree
23.	CHAI (for IT/SOCH)	Mr. Harkesh Dabas
24.		Dr. Umesh Chawla
25.	Officials of all heads of NACO HQ	Dr. Anoop, Dr. Naresh Goel, Dr. Shobini, Dr C. Das, Dr. Sunil Gupta, Dr. Vinita, Dr. Neha
26.	IIPA Team	Dr. Pawan Taneja, Dr. Roma Mitra, Dr. Sanjeev Kumar, Dr. Shalini Manocha

Annexure 4- Iteractions During Field Visits

List of Staff

IDI with the following staff at Ghaziabad on September 30, 2020-

S.NO.	Name	Division/Designation
1	Dr J.P. Srivastava	DTO
2	Mr Yogesh	TSU
3	Dr P.K. Khare	PD TI IDU
4	Nidhi Trikha	DPTC
5	Rahul Verma	ICTC Counsellor
6	Suman Chaudhary	STI clinic, Counsellor
7	Dr Sheel Verma	ARTC, MO
8	Dr Dinesh B Balige	MO, OST
9	Dr A.K. Singh	Senior Consultant (Ortho)
10	Dr Sandeep Pawar	MO, Blood Bank
11	Arun Kumar	DMLT, Tech Supervisor
12	Dr Mitesh Dyal	MO
13	Bharat Chauhan	Natural Care, PM
14	Shipender	Natural Care, M&E
15	Neetu	Natural Care, Counsellor
16	Anjum	Natural Care, ANM
17	Suresh	Natural Care, ORW
18	Babita	Natural Care, ORW-1
19	Manish	Natural Care, ORW-3
20	Gaurav	Natural Care, ORW-2
21	Manju	Abhiyakti Foundation, PM
22	Nishi Parashar	Abhiyakti Foundation, M&E

23	Subhangini	Abhiyakti Foundation, Counsellor
24	Ravi Kumar	Abhiyakti Foundation, ORW
25	Munish	Abhiyakti Foundation, ORW

Interaction with the following staff at DSACS and Dr Baba Ambedkar Hospital on October 01, 2020-

S.NO.	Name	Division/Designation
1	Dr Parveen Kumar	DSACS (HQ), APD
2	Dr J.K. Mishra	DSACS (HQ), JD (TI)
3	Virendra K.Rai	ICTC, Counsellor
4	Shikha Singh	ICTC, Counsellor
5	Dr Renu Gaur	MO, ICTC, Consultant Mircobiology
6	Praveen Singh	DPM, DAPCU
7	Ranjeet K.Jha	AD, TI DSACS
8	Dr Taruna Gupta	Senior Resident Skin (STD)
9	Yameen Ali	Counsellor, Skin (DSRC)
10	Dr Vivek Sagar	Skin HOD
11	Dr Priyanka	MO, ART
12	Dr Satish	MO, ART
13	Jay Prakash	Counsellor, ART
14	Manmohan Singh	Pharmacist, ART, CST
15	Lokesh Dahiya	Data Manager, ART, CST
16	Nivedita Jha	Counsellor, ART
17	Sonam	ART Care Coordinator
18	Yashoda	Counsellor, ART
19	Poonam Bisht	Data Manager, ART
20	Pratisha	Counsellor, ART
21	Dr V Rana	Nodal Officer, ART

Annexure 5 – Restrictions of Filling Vacancy Circular

A-11011/01/2018-NACO (HR)
Government of India
Ministry of Health & Family Welfare
National AIDS Control Organization

9th Floor, Chandralok Building
36 Janpath , New Delhi-110001
Dated: 9th May , 2018

To,

All the Project Directors
State AIDS Control Society

Subject: Filling up of Vacancies at SACS/District/Facility

Sir/Madam

The undersigned is directed to refer to NACO's letter no-G-20011/01/2014-NACO(F)/RE/2014-15 dated 20.11.2014 vide which SACS were inter-alia intimated not to fill any vacancy till further orders. The matter has been considered and in view of the urgent need indicated by SACs, the following is communicated:-

I. The SACS can fill vacant positions urgently required by them based on the Program needs within the approved sanctioned strength. While filling up these vacant positions , it may be ensured that the expenditure is kept within the approved AAP of the SACS for HR component. No additional allocation of funds may be demanded for this beyond approved AAP.

II. In order to ensure that the entire exercise is budget neutral, SACS may like to keep equal number of positions vacant. This will keep a control on expenditure.

III. SACS are requested to strictly follow the instructions issued vide letter dated 4th August, 2014 and keep their pace of expenditure on Institutional Strengthening per month within the prescribed upper ceiling limit.

IV. There will be no new creation of positions.

2. This issues with the approval of the Competent Authority.

Yours faithfully

(M.G.Nimje)
Under Secretary to Government of India

Copy to:
PPS to AS & DG, NACO
PS to JS, NACO
Additional DG-TI
All DDGs/ADG , NACO
DS (A&P), NACO / US (F), NACO