



NACO



CARE, SUPPORT & TREATMENT
National AIDS Control Programme, Phase-III, India

Publications from NACO in this series

National AIDS Control Programme: Response to HIV Epidemic in India

Targeted Interventions: National AIDS Control Programme, Phase-III, India

Condom Promotion: National AIDS Control Programme, Phase-III, India

Care Support & Treatment: National AIDS Control Programme, Phase-III, India

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CARE, SUPPORT & TREATMENT

National AIDS Control Programme, Phase-III, India



सत्यमेव जयते



National AIDS Control Organisation

India's voice against AIDS

Department of AIDS Control

Ministry of Health & Family Welfare, Government of India

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INTRODUCTION

The Care, Support and Treatment of People Living with HIV (PLHIV) is an important component of National AIDS Control Programme, Phase-III (NACP-III) and aims to provide comprehensive management to PLHIV with respect to prevention and treatment of Opportunistic Infections, Antiretroviral Therapy (ART), psychosocial support, home based care, positive prevention and impact mitigation.

The free ART services were introduced on 1st April, 2004 in eight government hospitals located in six high prevalence states. Since then, the services have been scaled-up to 306 centres providing ART to 4,12,125 patients across the country. In order to facilitate the delivery of ART services nearer to the beneficiaries, concept of Link ART Centre (LAC) was conceived and presently 612 LAC have been established.

All diagnostic as well as therapeutic services related to ART are provided free of cost to PLHIV. Any person who has a confirmed HIV infection is registered in HIV care at ART centre and is subjected to further evaluation for determining whether she/he requires ART or not by performing CD₄ count and other baseline investigations. All those eligible as per national technical guidelines are started on ART.

**“306 centres
providing free
ART to more
than 4,12,125
(till April 2011)
patients in
India”**



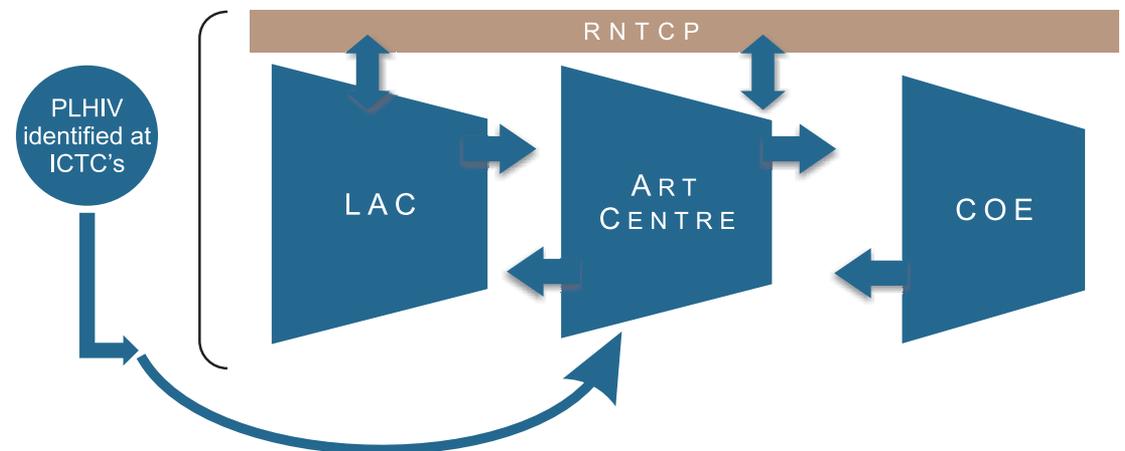
ART OPD

DELIVERY OF HIV TREATMENT AND CARE SERVICES

The delivery of care and treatment services for people living with HIV/AIDS is provided through a three-tier structure. The various levels where HIV care and treatment is provided are ART Centre, Link ART Centre and Centres of Excellence. ART centres are linked with Community Care Centres for a comprehensive package of services. There is a close linkage with Revised National TB Control Programme (RNTCP).

Roles of each facility in providing care, support and treatment are described below:

Three Tier Structure for HIV Treatment



ART centres

The ART centres are established mainly in the Medicine Departments of Medical Colleges and District Hospitals in the Government Sector. However, some ART centres are functioning in the sub- district and area hospitals also. The centres are set up based on prevalence of HIV in the district/region, volume of PLHIV detected and capacity of the institution to deliver ART related services. The main objective of Anti-retroviral Therapy (ART) Centre is to provide comprehensive services to eligible persons with HIV/AIDS including ART. NACO supports additional personnel (doctors, counselors, nurses, pharmacists, data managers and care coordinators) at these centres based on patient load. NACO also provides facilities for CD₄ testing at these sites and supplies ARV drugs, CD₄ kits and drugs required for treatment of Opportunistic Infections.

Objectives:

1. To screen PLHIV for eligibility to initiate ART based on clinical staging and CD₄ count
2. To monitor patients in Pre-ART Care and initiate ART as and when they become eligible
3. To monitor patients on ART and manage side effects, if any
4. To diagnose and treat Opportunistic Infections timely and also prophylaxis to prevent OI
5. To provide in-patient care as and when required
6. Educate PLHIV and their care givers on nutritional requirements, hygiene and measures to prevent transmission of infection
7. Provide comprehensive package of services including condoms and prevention education
8. To facilitate linkages between other service providers
9. To provide psychological support to PLHIV accessing the ART centre
10. To provide counseling for adherence to ARV drugs
11. To advise for risk reduction behaviour including usage of condoms

“Second Line ART is made available at 10 Centres of Excellence and ART Plus centres”

Centres of Excellence (COE)

At present, following 10 Centres of Excellence have been established across the country:

1. Maulana Azad Medical College, Delhi
2. Sir Jamshedjee Jejeebhoy Hospital, Mumbai
3. Byramjee Jeejabhoy Hospital, Ahmedabad
4. Post-Graduate Institute of Medical Sciences, Chandigarh



Waiting area of an ART centre in New Delhi

5. Gandhi Hospital, Hyderabad
6. Bowring and Lady Curzon Hospital, Bangalore
7. School of Tropical Medicine, Kolkata
8. Regional Institute of Medical Sciences, Imphal
9. Govt. Hospital of Thoracic Medicine, Tambaram
10. Banaras Hindu University, Varanasi

Besides routine functions of ART centres, their main responsibilities include, provision of second line and alternative first line ART, training, research work and mentoring of ART centres linked to them. Assessment of patients with suspected treatment failure to first line ART for initiation of second line ART is done by an expert panel known as State AIDS Clinical Expert Panel (SACEP) constituted at these COEs. In addition, Second Line ART is now also being made available at 21 upgraded ART centres labelled as ART Plus centres.

Link ART Centres (LAC)

During the course of up-scaling of ART services, it was observed that distance, travel time and costs are the main constraints to access ART services and adherence to treatment. As the treatment is lifelong and drugs are provided on a monthly schedule, PLHIV faced inconvenience which was one of the reasons for poor drug adherence, lost to follow up and missed cases. To make the treatment services more accessible and facilitate delivery of ARV drugs, Link ART Centres are established located mainly at district/sub-district level hospitals nearer to the patient's residence to improve accessibility. These LACs are located at the Integrated Counseling and Testing Centres (ICTC) which further helped in linkage between ICTC and ART services.



Counseling of a patient on ART

The main functions of LAC are monitoring patients on ART, drug distribution to patients on ART, treatment of minor OIs, identification and management of side-effects. At present there are 612 functional LAC in the country. As part of mid-term review, an assessment of the LAC scheme was undertaken which revealed that regularity of ARV drug pick-up and patients' satisfaction have increased significantly and cost and time on travel to access ART has decreased. Considering the gaps between those detected and those registered at ART Centre, LAC are being upgraded to LAC Plus Centre. LAC Plus Centres will also register the patient in HIV Care and do pre-ART management.

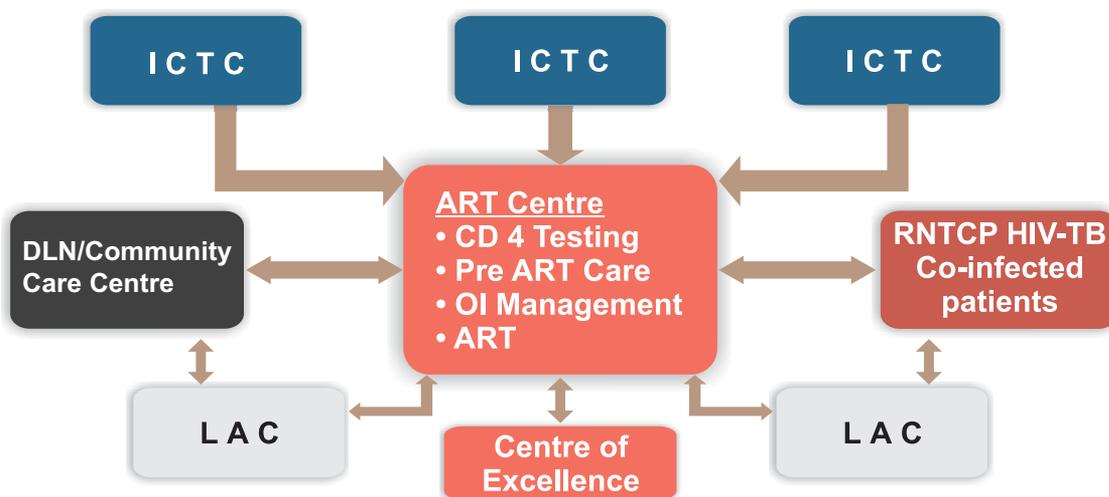
"612 Link ART Centres facilitate delivery of services nearer to the patients' homes"

Community Care Centres (CCC)

Community Care Centres (CCC) play a critical role in providing treatment, care and support to people living with HIV/AIDS (PLHIV). CCC are linked with ART Centres and ensure that PLHIV are provided (a) counseling for ARV treatment preparedness and drug adherence, nutrition and prevention, (b) treatment of Opportunistic Infections, (c) referral and outreach services for follow-up, and (d) social support services. These Centres are mandated to seek better community and family response towards PLHIV through family counseling. For better treatment outcome, the centres provide families of PLHIV counseling on the patient's nutritional needs, treatment adherence and psychological support. These centres are run by NGO selected through a vigorous selection process.

Presently, there are 259 CCC operational across the country.

ART Centre: Referral and Linkages



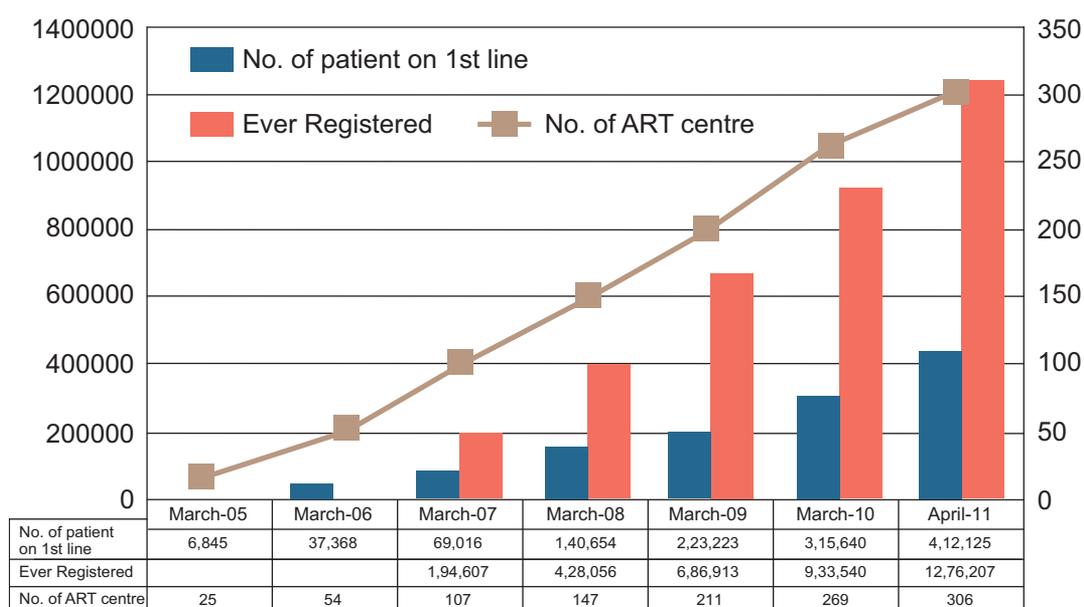
CARE, SUPPORT AND TREATMENT SERVICES

As on 30th April 2011, more than 4.12 lakh patients were receiving free ART in Government and other supported health care centres. Nearly, 1.3 million PLHIV have been registered at these ART centres. ART Scale-up during the last 4 years is depicted below:

Care, Support and Treatment Services: An Overview

No. of ART Centres	306
No. of Link ART Centres	612
No. of Community Care Centres	259
PLHIV Ever Registered with ART Centres	12,76,207
PLHIV on ART	4,12,125

ART Scale-up in India



Criteria for starting ART and regimen used under the national programme

The ART is offered free of cost to all People Living with HIV (PLHIV) who are eligible clinically as per the National Technical Guidelines. (ART Guidelines May 2008, updated April 2009).

Guidelines for ART initiation	
WHO Clinical Stage	CD ₄ Count (cells/mm ³)
I.	Treat if CD ₄ count < 250
II.	(if b/w 250-300 repeat CD ₄ after 4 weeks)
III.	Treat if CD ₄ count < 350
IV.	Treat irrespective of CD ₄ count
<p>Specific situations:</p> <p>1. HIV & Tuberculosis: (start Efavirenz based regimen)</p> <p>a) Pulmonary TB & HIV: start ART between 2 weeks to 2 months of initiation of ATT for all patients with CD₄ count < 350 cells/mm³ (for patients with CD₄ count >350 cells/mm³, defer ART)</p> <p>b) Extra Pulmonary TB & HIV: start ART between 2 weeks to 2 months initiation of ATT in all patients irrespective of CD₄ counts (special attention to monitor hepatotoxicity)</p> <p>2. HIV & Pregnancy:</p> <p>a) WHO stage I & II: start ART at CD₄ count < 250 cells/mm³ (if between 250-300, repeat after 4 weeks)</p> <p>b) WHO stage III: start ART at CD₄ count < 350 cells/mm³ (with strict monitor of adverse affects of nevirapine)</p> <p>c) WHO stage IV, start ART irrespective of CD₄ count.</p>	

ART Regimens:

The ARV drugs are available as Fixed Drug Combinations for first line, alternative first line and second line regimens in order to ensure good levels of adherence, ease in logistics related issues and ensure uniformity all across the country.

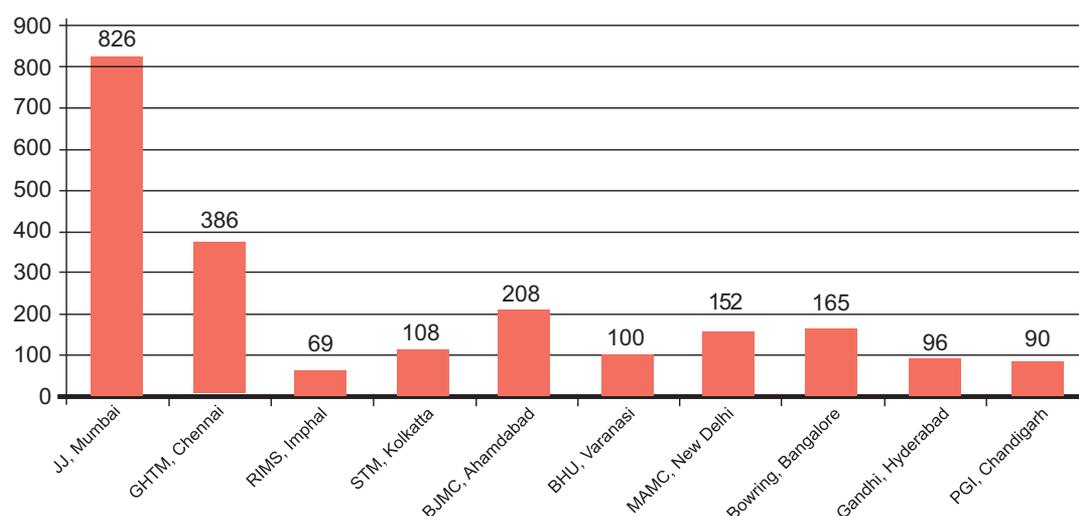
ARV drugs available as Fixed Dose Combinations, guidelines are developed to ensure uniform level of care

NACO ART	Regimen	
Regimen I	Zidovudine + Lamivudine + Nevirapine	First line regimen
Regimen I (a)	Stavudine + Lamivudine + Nevirapine	First line regimen
Regimen II	Zidovudine + Lamivudine + Efavirenz	First line regimen
Regimen II (a)	Stavudine + Lamivudine + Efavirenz	First line regimen
Regimen III	Tenofovir+ Lamivudine + Nevirapine	Alt. First line regimen
Regimen III (a)	Tenofovir + Lamivudine + Efavirenz	Alt. First line regimen
Regimen IV	Zidovudine + Lamivudine + Atazanavir/Ritonavir	Alt. First line regimen
Regimen IV (a)	Stavudine + Lamivudine + Atazanavir/Ritonavir	Alt. First line regimen
Regimen V	Tenofovir + Lamivudine + Atazanavir/Ritonavir	Second line regimen

Roll-out of Second Line ART

The patients started on ART can continue on first line ART for a number of years if their adherence is good. However, over the years some percentage of PLHIV on first line ART develop resistance to these drugs due to mutations in virus. Hence, a need was felt for providing second line ART also as ART programme matured over the years. The roll-out of second line ART began from January 2008 at 2 sites – GHTM Tambaram, Chennai and JJ Hospital, Mumbai on a pilot basis and has now been expanded to 10 centres of excellence from January 2009. Presently, 2239 patients are receiving second line drugs at these 10 centres. In addition, 21 ART Centres are being upgraded into ART Plus Centres to cater for second line and alternative first line ART. The second line ART costs nearly Rs 29,000 per patient per year as compared to Rs 5000 for first line ART per patient per year.

No. of Patients on Second Line ART



Alternative First Line ART

It has been observed that a small number of patients initiated on first line ART experience acute/chronic toxicity/intolerance to first line ARV drugs necessitating change of ARV drugs to alternative first line drugs. Presently, the roll-out of alternative first line ART is restricted to 10 Centres of Excellence across the country. However, all 306 ART centres have been linked to 10 centres of Excellence and 21 ART Plus Centres for second line and alternative first line ART. Currently, 1078 patients are on alternative first line ART. For evaluation of patients for initiation on second line and alternative first line, State AIDS Clinical Expert Panel (SACEP) has been constituted at all 10 Centres of Excellence (COE). The members of this panel are:

- Nodal Officer of COE/ART centre,
- One more ART expert (from a panel of experts nominated by NACO)
- Regional Coordinator/Jt. Director (CST)/Consultant (CST) at SACS

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

Technical and Operational Guidelines

The following technical and operational guidelines have been developed by the National AIDS Control Organization to ensure that uniform level of care is delivered across all health care facilities in the country.

1. Guidelines for ART in adults and adolescents
2. Guidelines for ART in children
3. Guidelines for prevention and management of common Opportunistic Infections and malignancies among adults and adolescents
4. Post-Exposure Prophylaxis guidelines
5. Technical guidelines on second line ART in adults and adolescents
6. Technical guidelines for alternative first line ART in adults
7. Technical guidelines for second line ART roll-out in children
8. Guidelines for care of the exposed child (early infant diagnosis)
9. Operational guidelines for ART centres
10. Scheme/Operational guidelines for the Centres of Excellence
11. Operational guidelines for Link ART Centre
12. Operational guidelines for Community Care Centres
13. Guidelines for HIV care for prisoners
14. Guidelines for airborne infection control

“1701 people receiving 2nd line ART, 10 centres providing alternative 1st line ART”



Pharmacist of an ART Centre

Strengthening the Capacity of Laboratories for CD4 Testing:

Presently 212 CD₄ machines are installed in the country to take care of 306 ART centres. In some centres where there is no CD₄ machine a linkage is established with a nearby CD₄ machine where by samples are collected and transported by technician and patient does not have to go to another site to get CD₄ test done. The CD₄ kits are procured centrally and supplied to all sites with mechanism to ensure there are no stock-outs.

MONITORING AND EVALUATION

A standardized set of reporting formats and tools have been developed and are being used by all facilities to ensure the uniform reporting. These include:

1. Pre-ART register
2. ART enrolment register
3. Patient ART record (White Card)
4. Patient ID card (Green Book)
5. Drug stock register
6. Drug dispensing register
7. Monthly report format for reporting on first line ART
8. Monthly report format for reporting of adult patients on second line ART
9. Monthly report format for reporting of children on second line ART
10. Monthly CCC reporting format

In the monthly ART centre reporting format and the patient white card detailed information about the patient is entered. Starting from address to socio-economic status, employment status, level of education, information about any high risk activity, any present and past clinical presentations, CD₄ counts, etc. is mentioned in the records.

“Standardized
set of reporting
formats and
tools
developed”



ART Pharmacy

Technical Resource Groups:

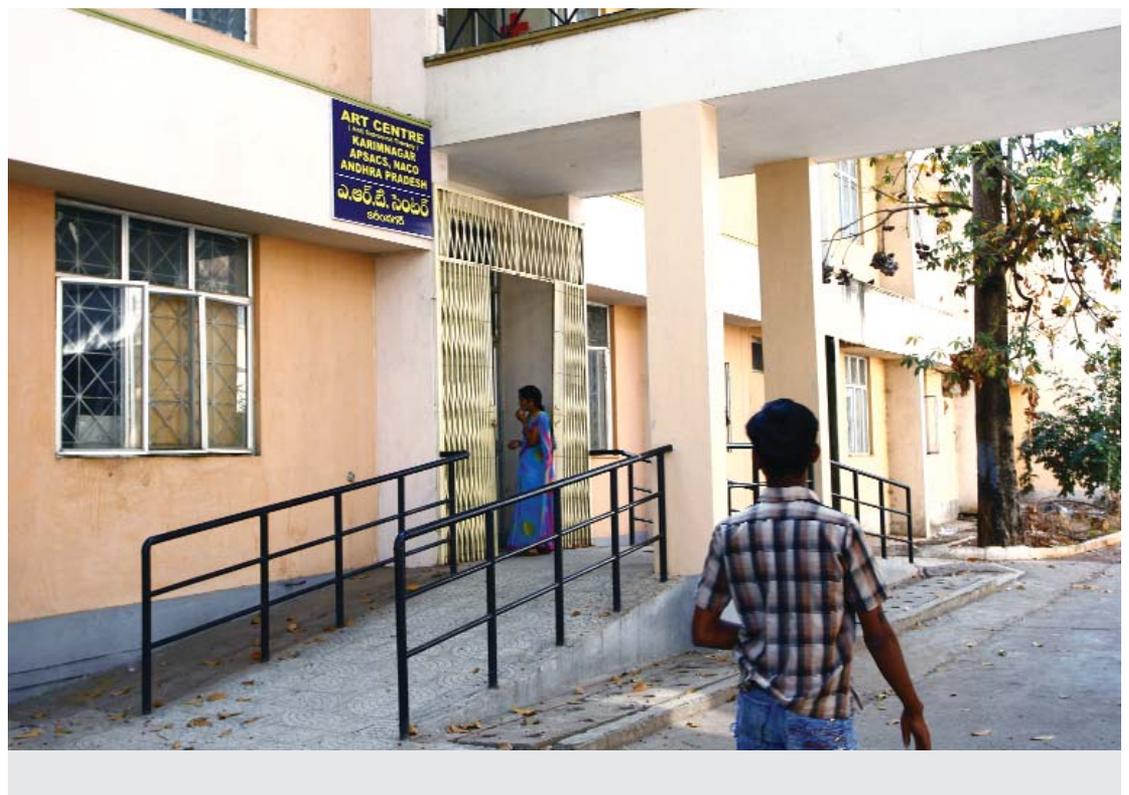
Technical Resource Groups have been constituted on ART, Paediatric issues, Laboratory Services and CCC for discussion and recommendations on various technical and operational issues relating to the programme and matters relating to major policy issues. These TRGs meet periodically to incorporate any modifications/changes required in the guidelines.

Supply Chain Management for ARV Drugs

One of the most vital components of drug adherence is continuity of supply of drugs to the centres. Monitoring is done centrally for all ARV drugs based on monthly consumption and stocks at the centres. As per guidelines, all ART centres must have a minimum of 3 months stock of drugs. In case of shortage, re-location of drugs is done in order to ensure that there are no stock-outs. The supply chain management of ARV drugs is done by a dedicated Logistic Coordinator appointed at NACO.

Supervisory/Mentoring Mechanism

For close monitoring, mentoring and supervision of ART centres, various states have been grouped into regions and Regional Coordinators have been appointed to supervise the programme in their regions. Currently there are 11 Regional Coordinators in various parts of the country. The Regional Coordinators visit each allotted ART centre at least once in two months and they send regular weekly and monthly reports to NACO. Periodic meetings of Regional Coordinators are held at NACO to review various issues pointed out by them. In addition, officers from the State AIDS Control Societies (SACS) also monitor CST related activities in the state. NACO and SACS officials also visit those centres which have not been performing satisfactorily or are facing problems in implementation of the programme.



ART centre in Andhra Pradesh

State Grievance Redressal Committee

At the state level, Grievance Redressal committee has been constituted to routinely review functioning of the ART Centres. The committee is headed by the Health Secretary of the State and consists of Project Director of the SACS, Director Health Services, and the Nodal Officers of the ART centre, representative of Civil Society/positive network and NACO. This mechanism ensures that issues pertaining to grievances on PLHIV are brought into notice of state authorities and SACS in systematic manner for timely response.

Missed/LFU Tracking Mechanism

The information on patients lost to follow up (LFU) is captured in the CMIS through the monthly reports from the ART Centres. This information is monitored very closely and Centres with high rates of LFU are visited by senior officers of NACO/SACS. Presently the cumulative LFU has been reduced to nearly 7%. The responsibility of tracking and providing home-based counseling for patients LFU is shared with CCC through outreach workers, PLHA networks and counsellors of ICTC in some places.

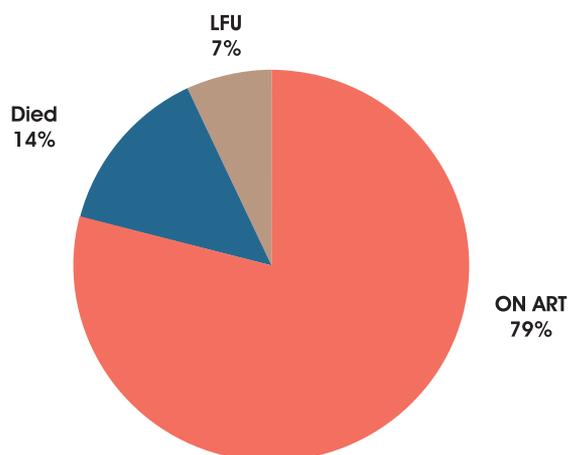
Follow up of Pre-ART LFU

All patients registered in Pre-ART undergo a CD₄ test every six months. The ART centre lab technician maintains a “due list” of the patients who are due for CD₄ testing. This list is prepared from CD₄ laboratory register. This list is made available with SMO/MO and during patients visit in that particular month for ART, patient is subjected to a CD₄ test. Those who do not undergo CD₄ test within one week of their due date, they are followed up by phone call to ensure CD₄ test is done on the next visit.

Smart Card

The Smart Card Project has been initiated to strengthen the monitoring and evaluation framework of the National Anti-Retroviral Treatment programme in India. This project will help people who suffer

Cumulative Treatment Outcome



**“Smart Card
Project initiated
to strengthen the
M & E
framework of the
ART programme”**

from HIV to remain mobile and still have access to the same quality of treatment and care in any part of the country. In particular, it addresses the following issues that are specific to HIV/AIDS:

1. Much of the affected population is mobile. This card will help in accessing care and support in all parts of the country (presently in 7 states)
2. Monitoring of treatment to ensure adherence to the treatment plan is essential to prevent the patient from becoming drug resistant
3. The patient’s information can be kept confidential given the prejudices against the infection
4. Acts as a portable medical record
5. Plays a crucial role in time-sensitive emergency situations
6. Gives a cheaper alternative for storing data using the latest technology
7. Prevents misuse of health subsidies

Application Software for the Smart Card system has been developed and the project implementation will begin during 2011-12.

Training for ART Personnel

As a pre-requisite for establishing the treatment Centres, the recruited contractual staff have to undergo a 12 day training at the institutions that are identified for training. Apart from the training of counselors and doctors at the ART Centres, the faculty team (consisting of 10 senior level persons) from the institute is also identified and trained. For this purpose, 16 training centres have been identified across the country. The various types of trainings undertaken by NACO for its staff at the ART centres/Link ART Centres and Community Care Centres are summarised below:

- Faculty training (specialist training) - 4 days
- ART centre Medical Officer training (SMO/MO) - 12 days
- LAC/CCC Medical Officer training (MO) - 3/4 days
- Counselor training - 12 days
- Data Entry Operator training - 3 days
- Laboratory Technician - 2 days
- Pharmacist training - 3 days

NEW INITIATIVES

ART Plus Scheme

Second line ART was rolled out in the country at 2 Centres of Excellence (COE) in January 2008. Later, it was expanded to 10 Centres in January 2009. It has been observed that patients need to travel long distance to access the second line treatment. This issue has resulted in low uptake of second line treatment and also inconvenience and difficulties to patients. In View of these, it was decided to expand the number of facilities that can provide second line ART. For this, it was planned to upgrade some good functioning ART Centres with geographical considerations and label them as 'ART Plus Centres'.

Nevirapine is available for exposed children at 'ART Plus Centres'

Criteria for the selection of ART Plus Centres

- The capacity of the institution to provide second line ART and linkage to laboratory for viral load testing
- The availability of trained manpower in the institution
- The geographical distribution of patients on second line ART
- Accessibility and connectivity

Currently, ART Plus Centres are being set up at following sites:

- a. ART Centre, GMCH, Aurangabad, Maharashtra
- b. ART Centre, GMCH, Nagpur, Maharashtra
- c. ART Centre, Sasoon Hospital & B J Medical College, Pune, Maharashtra
- d. ART Centre, GMCH, Surat, Gujarat
- e. ART Centre, GMCH, Salem, Tamilnadu
- f. ART Centre, KIMS, Hubli, Karnataka
- g. ART Centre, GGH, Vijayawada, Andhra Pradesh
- h. ART Centre, Govt. Medical College, Thrissur, Kerala

In addition, ART Plus Centres have been sanctioned at 13 more ART Centres and shall be further expanded in a need based mannner so as to provide one ART Plus in each state and 4 'ART Plus' in high prevalance sttes of Karnataka, Andhra Pradesh, Maharashtra and Tamil Nadu.

Clinical expert panels are being developed at all these sites for management of complicated cases with treatment failure.

Second line ART, alternative first line ART and Proteas Inhibitors (PI) based regimen for Nevirapine exposed children are available at 'ART Plus Centres'.

LAC Plus Scheme

Initially, the main functions of LAC were monitoring of patients on ART, drug distribution to patients on ART, treatment of minor OIs, identification and management of side-effects and reinforce adherence on every visit. At present there are more than 612 functional LACs. As part of mid-term review, an assessment of the LAC scheme was undertaken which revealed that after the roll out of LAC, patient satisfaction has increased significantly and cost as well as time on travel to access ART has decreased. It has been observed that all persons detected HIV positives at ICTC do not get linked to care, support & Treatment Services. The reason for this could be that many persons are asymptomatic at the time of detection and long distances to reach the ART centre even for registration and basic investigations may compel them postpone the visit to ART Centres. It has been observed from data on patients on ART that nearly 20% patients reach the ART Centres at a very late stage (CD₄ count <50) when the risk of mortality is nearly 3 times higher. In view of these facts, it was decided to revise the scope of Link ART Centres to:

1. Integrate HIV Care, Support & Treatment services with the Primary/Secondary Health Care system;
2. Build the capacity of the health care providers at the Primary Health Care Level for Care, Support and treatment services;
3. Increase the access of ART services to the PLHIV;
4. Bridge the gap between ICTC (Integrated Counseling & Testing Centres) services and CST (Care, Support & Treatment) services;
5. Improve the ARV drug adherence of patients on ART;
6. Reduce the travel cost and travel time of PLHIV in accessing ART services;

LACs having more than 70 PLHIV on ART will be upgraded as 'LAC Plus' under the revised scheme. Functions of LAC Plus are given below:

1. Enrolment of PLHIV into HIV care and treatment (Pre-ART Care)
2. Pre-ART management including basic investigations and sample collection for CD₄ count
3. Follow up of pre-ART patients not eligible for ART
4. Referral of eligible patients to Nodal ART Centres for ART initiation
5. Screening of HIV-TB Co-infection
6. Monitoring of PLHIV on ART
7. ARV Drug distribution
8. Treatment of Minor OIs
9. Identification of side-effects of ART
10. Counseling on adherence, nutritional and positive prevention
11. Tracing of LFU and missed

The process has already been initiated for the up-gradation of nearly 100 centres as LAC Plus

HIV-TB linkage

It is estimated that nearly 2.3 million people are infected with HIV in India. Considering the estimated 40% of the Indian population infected with Mycobacterium tuberculosis, around one million persons are estimated to be HIV infected TB patients. Active TB disease is the most common opportunistic infection amongst HIV infected individuals. It is estimated that, in India, 55-60% of AIDS cases reported, had TB and it is one of the leading cause of death in PLHIV. This is further substantiated by the fact that an HIV positive person has 50-60% lifetime risk of developing TB as compared to an HIV negative person who has a lifetime risk of 10% of developing the TB disease. An HIV infected person newly infected with TB has higher chances of developing the disease. The rate of progression from infection to disease is also ten to thirty times higher among HIV-TB co-infected than among patients infected with TB only. The best way to prevent TB is to conduct prompt early diagnosis and provide effective treatment to people with infectious TB. This interrupts the chain of transmission and can thus prevent the disease burden of HIV-TB co-infected cases. Therefore, the primary intervention is to further establish and expand strong cross referrals and linkages between the existing service delivery sites of RNTCP and NACP like DMCs, ART centres/CCCs/ICTCs and thus improve the diagnostic facilities and treatment options for the HIV-TB co-infected patients.

A line list of co-infected persons has been prepared by NACP and RNTCP. This will ensure fast tracking of patients co-infected with HIV and TB and also ensure proper treatment. Guidelines have also been jointly prepared by Central TB Division and HIV-TB Division at NACO for training of medical officers, posted at ART centres, on TB diagnosis and treatment.

Measures for Air-borne Infection Control

Airborne pathogens are smaller than droplet (less than 5µm) and remain suspended in the air for a long period of time. They are transmitted when people inhale contaminated air. Examples of conditions include Pulmonary Tuberculosis, Measles, Varicella, Severe Acute Respiratory Syndrome (SARS) and Swine flu caused by Influenza A (H1N1) virus. Air-borne pathogens in health care environment pose considerable risk to immune-compromised patients who may inhale fungal spores, bacteria and viruses. Air-borne micro-organism can lead to life-threatening infections, costing health care services



HIV-TB cross-referral

substantial amount every year. Control of air-borne infectious agents, in health care facilities is critical both to effective health care and to the control of direct and indirect health care costs. In regards guidelines have been developed and specific instructions have been given to the centres.

Guidelines for HIV Care for Prisoners

Patients in prison have the same rights for health care just like those not in prison. HIV/AIDS is a serious health threat for prison populations and presents significant challenges for prison, public health authorities and national governments. There are 1305 prisons in India (Central Prison -93. District Prison-257, Sub-Prison-850, Open Prison-2, Special Prison-28, Women Prison-17, Borstal Institution- 13, and Juvenile and Lunatics Camps-13) having the authorized capacity of 2,14,241.

It has been also found that the prison conditions increase the progression of HIV and the onset of AIDS and death. Prison environment governs the nutrition provided, status of Stress & Opportunistic Infections in the positive inmates. Crowded, poorly ventilated cells increase the risk of TB for all prisoners. One study conducted in South African prisons found that 90-95% of deaths in prison are AIDS-related, primarily in conjunction with TB.

Thus, prisons represent an intervention opportunity, a chance to reach a high risk segment of the population that might otherwise be missed. Health care, treatment, and education have been identified as the critical aspects. The guidelines for testing and care in prisons have been developed and shall be implemented soon.

ART Services in Other Sectors

It is understood that all the patients who require ART will not necessarily be accessing government health set-up and a significant number will be getting treatment from private sector, NGOs and other institutional/workplace health care facilities. Some of the steps already taken in this direction are:

- NACO is partnering with Confederation of Indian Industries (CII), IBT, FICCI and other corporate



ART Centre establish in partnership with ACC

sectors on workplace intervention and provision of care, treatment and other support to people living with HIV/AIDS.

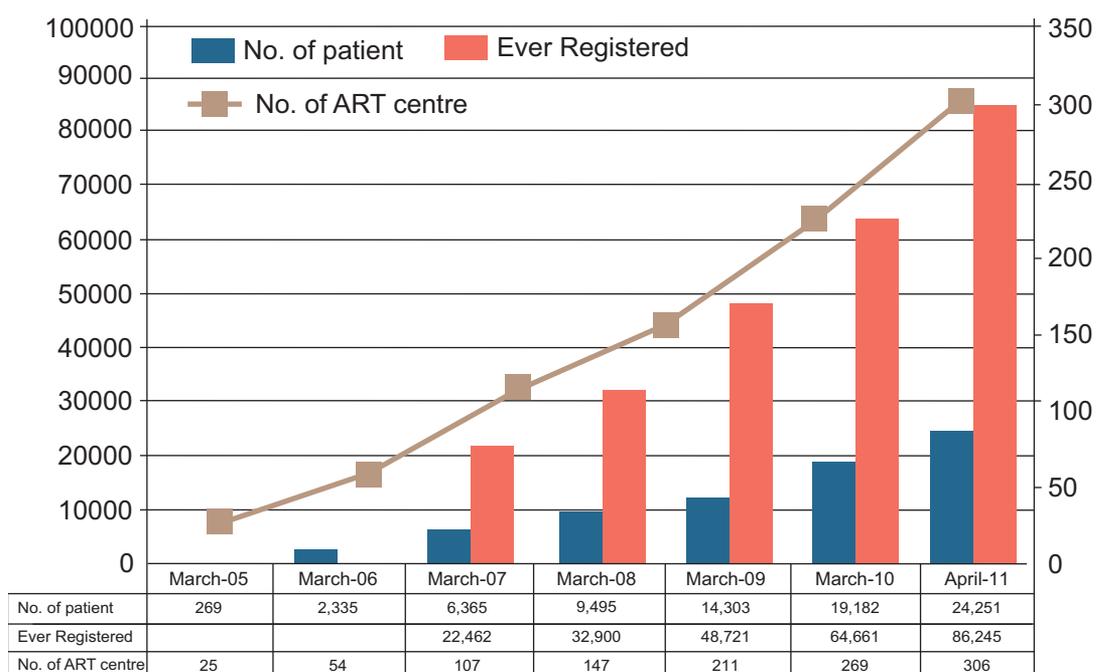
- NACO is in regular interaction with its intersectoral partners like ESI, Railways, SAIL, Paramilitary Forces, Defence, and NGO sector.

National Pediatric HIV/AIDS Initiative

The National Pediatric HIV/AIDS Initiative was launched on 30th November 2006 and currently there are nearly 86,245 CLHA registered in HIV care at ART centres. Currently 24,251 CLHA are receiving ART across 306 ART centres. Out of these 306 centres, seven ART centres have been upgraded as Regional Pediatric Centers that provide comprehensive specialized services to children with HIV/AIDS. These centres are also to be the nodal points for research in pediatric care.

“Pediatric ART being provided to 24,251 children through 306 centres”

ART Scale-up in India (CLHA)



Regional Pediatric Centres (RPC)

The seven Regional Pediatric Centres are situated in hospitals specially for children. Their main work is to provide second line ART to children, do research, mentor ART centres as per allocation and treatment of complicated cases. The seven RPCs are as below:

1. Indira Gandhi Institute of Child Health (IGICH), Bangalore
2. LTMG, Sion Hospital, Mumbai
3. Jawahar Lal Nehru Hospital, Imphal
4. Kalawati Saran Hospital, New Delhi



Waiting area of pediatric ART centre

5. Medical College, Kolkata
6. Niloufer Hospital, Hyderabad
7. Institute of Child Health, Chennai

Care of the Exposed Child

HIV disease progresses very rapidly in young children, especially in the first few months of life, often leading to death. Addressing HIV/AIDS in children especially infants below 18 months is a significant global challenge. HIV-infected infants are the most vulnerable of all patients. HIV infected infants frequently present with clinical symptoms in the first year of life. Where diagnostics, care and treatment are not available, studies suggest that 35% of infected children die in the first year of life, 50% by their second birthday, and 60% by their third birthday. A critical priority in caring for HIV-infected infants is accurate and early diagnosis of HIV. The diagnosis of HIV infection in infants younger than 18 months is different from that in adults.

With the tremendous expansion in HIV programme in PPTCT, ICTC, ART (for adults and children) including access to early diagnosis of HIV before 18 months of age. It is now possible to ensure that HIV-exposed and infected infants and children get the required essential package of care. The EID programme is being rolled-out in phased manner through 767 ICTCs and 181 ART Centres in the country.

Objectives of the programme are:

1. To identify the HIV-infected child early, prior to the development of clinical disease during the first months of life;
2. To reduce pediatric mortality and morbidity due to HIV/AIDS; and
3. To initiate ART in an infant with rapidly progressing HIV-disease.

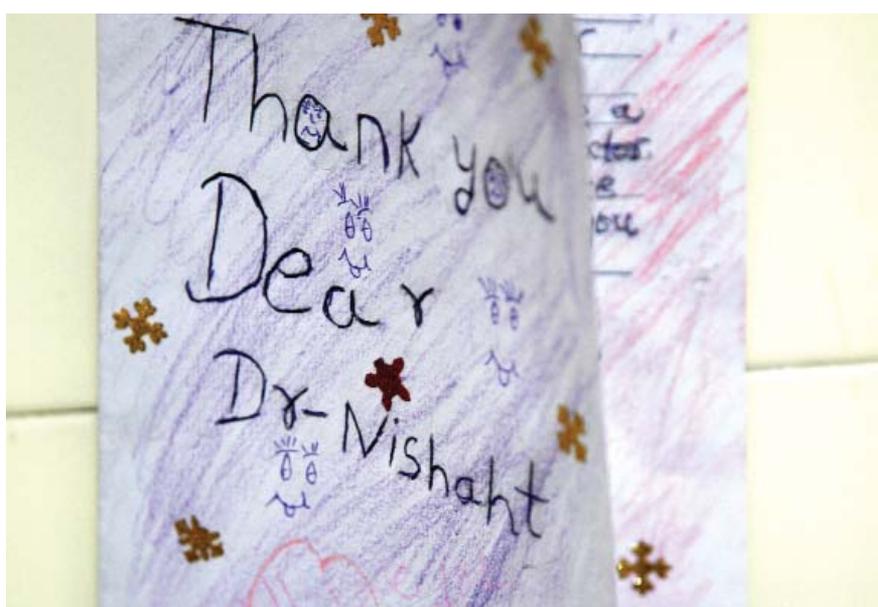
Pediatric second line:

While the first line therapy is efficacious, certain proportion of children shall show evidence of treatment failure. There is not much data on the failure rate on Nevirapine based ART in children. However, the WHO estimates that the average switch rate from first to second line ART per year for adults are around 3% (Prioritizing Second-Line Antiretroviral Drugs for Adults and Adolescents: a Public Health Approach; report of a WHO Working Group Meeting, WHO, Geneva 2007). It is likely that the similar rates are applicable for children as well. It is important to have reliable estimates of the failure rate so as to plan scale-up of second line therapy for children.

**“Infant and Child
Diagnosis
programme
being rolled-out
through 766
ICTC and 181
ART Centres”**

The various regimens available under the National Programme for children affected by HIV/AIDS are:

Regimen P I	Zidovudine + Lamivudine + Nevirapine	Preferred paediatric regimen for new initiation
Regimen P I (a)	Stavudine + Lamivudine + Nevirapine	For children with Hb 9 g/dL
Regimen P II	Zidovudine + Lamivudine + Efavirenz	preferred for children on anti-tuberculosis treatment; Hb >9 g/dL and weight > 10 kg
Regimen P II (a)	Stavudine + Lamivudine + Efavirenz	for children on anti-tuberculosis treatment; Hb 9 g/dL and weight > 10 kg
Regimen P III	Abacavir + Lamivudine + Nevirapine	For patients not tolerating AZT or d4T on a NVP-based regimen
Regimen P III (a)	Abacavir + Lamivudine + Efavirenz	For patients not tolerating AZT or d4T on a EFV-based regimen
Regimen P IV	Zidovudine + Lamivudine + Lopinavir/Ritonavir	For patients not tolerating both NVP and EFV, and Hb >9 g/dL
Regimen P IV (a)	Stavudine + Lamivudine + Lopinavir/Ritonavir	For patients not tolerating both NVP and EFV and Hb >9 g/dL



A greeting card to the doctor from a child on ART

ACRONYMS

AIDS	Acquired Immuno-deficiency Syndrome
ART	Anti Retroviral Therapy
BCC	Behaviour Change Communication
BSS	Behavioural Surveillance Survey
CCC	Community Care Centre
CSMP	Condom Social Marketing Programme
CSW	Commercial Sex Worker
CVM	Condom Vending Machine
FC	Female Condom
FSW	Female Sex Worker
HIV	Human Immuno-deficiency Virus
HLFPPT	Hindustan Latex Family Planning Promotion Trust
ICTC	Integrated Counseling and Testing Center
IDU	Injecting Drug User
IPC	Interpersonal Communication
LAC	Link ART Centre
LFU	Lost to Followup
MoHFW	Ministry of Health and Family Welfare
MSM	Men who have Sex with Men
NACO	National AIDS Control Organization
NACP	National AIDS Control Programme
NFHS	National Family Health Survey
NRHM	National Rural Health Mission
NGO	Non-Governmental Organization
NSS	National Service Scheme
OI	Opportunistic Infections
PLHIV	People Living with HIV
RTI	Reproductive Tract Infection
SACS	State AIDS Control Society
SMO	Social Marketing Organization
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TI	Targeted Intervention
TSG	Technical Support Group

NACO envisions an India where every person living with HIV has access to quality care and is treated with dignity. Effective prevention, care and support is possible in an environment where human rights are respected and where those infected or affected by HIV/AIDS live a life without stigma and discrimination.

NACO has taken measures to ensure that people living with HIV have equal access to quality health services. By fostering close collaboration with NGOs, women's self-help groups, faith-based organisations, positive people's networks and communities, NACO hopes to improve access and accountability of the services. It stands committed to building an enabling environment wherein those infected and affected by HIV play a central role in all responses to the epidemic - at state, district, and grassroots level.

NACO is thus committed to contain the spread of HIV in India by building an all-encompassing response reaching out to diverse populations. We endeavour to provide people with accurate, complete and consistent information about HIV, promote use of condoms for protection, and emphasise treatment of sexually transmitted diseases. NACO works to motivate men and women for a responsible sexual behaviour.

NACO believes that people need to be aware, motivated, equipped, and empowered with knowledge so that they can protect themselves from the impact of HIV. We confront a stark reality - HIV can happen to any of us. Our hope is that anyone can be saved from the infection with appropriate information on prevention. NACO is built on a foundation of care and support, and is committed to consistently fabricate strategic responses for combating HIV/AIDS situation in India.



National AIDS Control Organisation

**India's voice against AIDS
Department of AIDS Control**

Ministry of Health & Family Welfare, Government of India
www.nacoonline.org