

National AIDS Control Programme



OPERATIONAL GUIDELINES FOR ART SERVICES

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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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सत्यमेव जयते

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FOREWORD

Under the National AIDS Control Programme, the Government launched the free ART initiative in April 2004 at 8 hospitals. With the scale up of the program and need for universal coverage for treatment, the network of ART centres has also expanded. Currently there are 355 ART centres providing ART to more than 5.41 lakh people living with HIV/AIDS.

Over the years, scale up has not just been in terms of number of centres but also to improve the quality of services provided to PLHIV. In order to achieve this various initiatives have been undertaken in the last few years like introduction of alternative first line and second line ART, Centres of Excellence for adults and pediatrics, ART plus centres, Link ART centre, Link ART plus centres and Pediatric ART. Thus the Operational guidelines which were last reviewed in May 2008 required further revision to include these elements in these guidelines.

The guidelines describe the functions of the ART centres, general infrastructure required for the establishment of the centre, various reporting and recording tools, measures to improve retention in HIV care, supply chain management of drugs and various other aspects that are essential to ensure quality treatment for people living with HIV/AIDS.

I hope that these guidelines will be of immense help to the Health Care Providers and Programme Managers and serve as ready reckoner for providing excellent and high quality care to PLHIV.

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अपनी एचआईवी अवस्था जानें, निकटतम सरकारी अस्पताल में मुफ्त सलाह व जाँच पाएँ

Know Your HIV status, go to the nearest Government Hospital for free Voluntary Counselling and Testing

CONTENTS

CHAPTER	PAGE No.
1 Introduction	1
2 Guidelines for Service Providers	3
2.1 Objective of ART Centres	3
2.2 Functions of ART Centre	3
2.3 Selection Criteria for ART Centre	5
2.4 Steps for setting up ART Centre	6
2.5 Infrastructure	8
2.6 Human Resource	12
2.7 Financial Management	22
2.8 Drugs	23
2.9 Universal Work Precautions	24
2.10 Linkages and Referrals	25
3 Standard Operating Procedure (SOP) at ART Centres	29
3.1 The First visit	30
3.2 The Second Visit	32
3.3 Initiation of ART	35
3.4 Subsequent Follow-up Visits (Once a month)	37
3.5 Confidentiality and Discrimination Issues	40
3.6 Supports from NGOs and Positive Network Groups	40
4 Monitoring and Mentoring of ART Centres	41
4.1 Monitoring Tools	41
4.2 Reporting Mechanism and Flow of Information	43
4.3 Responsibility of the CST Division at SACS	43
4.4 Documents, Guidelines and Monitoring Tools	46
4.5 ART centre review meetings	47
5 Retention into HIV Care	49
5.1 Stages of lost to follow up	49
5.2 Monitoring of patients in 'Pre- ART' care	50
5.3 Monitoring patients on ART	51

6	HIV-TB Collaborative Activities at ART Centres	53
6.1	Involvement of CST Officer in HIV- TB activities	53
6.2	Reporting for HIV-TB activities from ART centres	53
6.3	Training and recording/reporting formats	53
6.4	Cotrimoxazole Preventive Therapy CPT	54
6.5	Review of Records	54
6.6	Patient flow for DOTS	54
6.7	Anti tuberculosis therapy and antiretroviral therapy	54
6.8	Air borne infection control	55
7	Care of HIV Exposed Infants and Children	57
7.1	Early Infant Diagnosis	57
7.2	Role of ART Centres in Care of Exposed Child	60
8	Second line ART related Activities	65
8.1	National AIDS Clinical Expert Panel (NACEP)	65
8.2	State AIDS Clinical Expert Panel (SACEP)	66
8.3	Linkages with Centres of Excellence	66
8.4	ART plus Centres	66
8.5	Steps for referral for alternate/ second line ART	67
9	Scheme for Link ART Centres and LAC Plus Centres	69
9.1	Objectives of Link ART Centres/ LAC Plus	69
9.2	Functions of LAC	70
9.3	Manpower for LAC/LAC Plus	71
9.4	Financial Assistance for Link ART Centres	72
9.5	Responsibility of ART Centres w.r.t Link ART centres	72
9.6	For Pre -ART patients (applicable for LAC plus only)	73
9.7	Communication	74
9.8	Reporting formats to be used	74
9.9	Mentoring visit by ART centre SMO/MO	75
9.10	Reporting to NACO	75
9.11	Mentoring & Monitoring of LAC	75
10	Supply Chain Management of ARV drugs	77
10.1	Responsibility of NACO	77
10.2	Responsibility of SACS	77
10.3	Responsibility of ART Centres	78
10.4	Guidance to SACS	78
10.5	Guidance to ART Centres	80
	Annexures	83
	Acknowledgements	

Introduction

India has an estimated 2.39 million people living with HIV/AIDS. The free ART initiative under NACP II was launched on 1st April 2004 at eight institutions in six high prevalent states and the National Capital Territory of Delhi. Since then, it has been scaled up in a phased manner. As on March 2012, a total of 355 ART centres are functional in 31 States and Union Territories and more than 5,16,000 patients are receiving antiretroviral treatment (ART) at these centres. In addition, another 25,000 – 30,000 patients are receiving free ART in the Private sector.

Second Line ART was rolled out in the country on 1st January 2008 on a pilot basis in 2 centres of Excellence and later on expanded to all 10 Centres of Excellence. In order to expand the access to second line treatment, 25 ART centres in the country have been upgraded as "ART Plus" centres and capacitated to provide second line/alternative first line treatment to eligible PLHIV. Currently nearly 5000 PLHIV are receiving free second Line ART/ alternative first line ART and this scheme is being expanded in a need based manner.

The plan for scale up of ART services in India includes:

- a) Identification of the institutions (health facilities to set up ART centre/ Link ART centre)
- b) Strengthening of laboratory infrastructure by providing CD4 machines or appropriate linkages
- c) Capacity building of faculty of the institutes, including the contractual staff by structured training in HIV care
- d) Procurement and supply chain management of ARV drugs
- e) Availability of Opportunistic Infection drugs for prophylaxis and treatment of Opportunistic Infections
- f) Up-gradation of high load Link ART Centres (LAC) to "LAC Plus" where Pre ART services shall also be made available to the PLHIV

As we are expanding the access to ART rapidly, it is very important to maintain the quality of care, support and treatment programme & ensure that ART related services are carried out efficiently and are well coordinated and documented.

India has the capacity to scale up ART with advantages that many other countries do not have. These include having an established domestic drug manufacturing base providing cheap but quality ARV's and an enviable pool of master trainers, structured training curriculum, training institutes and large number of trained health professionals. However, the unprecedented challenges for programme management and service delivery need be candidly identified, and addressed in a systematic manner.

A public health approach for the provision of ART implies that ART regimen should be standardised, easy to use and have minimal adverse effects. Scaling up ARV treatment also calls for active involvement of a range of stake-holders, including those living with HIV, other community members and civil society at large.

It is desirable to have certain specific services, facilities and protocols in place before starting ART. These are necessary due to the complexity of accessing and continuing the therapy, the need for close clinical and laboratory monitoring and the cost of therapy. These services include:

1. Easy access to an ART centre, ideally located in the medical OPD of the hospital with adequate space and privacy for examination, counselling and therapy with medical and general equipment necessary to carry out best practices
2. Medical services with trained physicians and other health care personnel capable of identifying and treating common HIV-related illnesses and OIs. Care and support services to provide treatment adherence counselling and psychosocial support to PLHIV and their families. These services should ideally involve trained health care providers, people living with HIV/AIDS and community based care organisations
3. Reliable laboratory and radiological services capable of performing routine laboratory investigations such as HIV antibody testing, pregnancy testing, complete blood picture, serum bio-chemical tests, X rays etc. Access to a laboratory capable of performing CD4 count which is essential to monitor therapy
4. Reliable and affordable access to quality antiretroviral drugs and drugs to prevent and treat OIs and other related illnesses

Guidelines for Service Providers

These guidelines focus on the objectives and functions of the ART centres and the process involved in the setting up of the ART centres like infrastructure, equipments, supplies, human resource, SOP's, monitoring tools and financial guidelines for ART centre. These guidelines provide directions for setting up new ART centres and functioning of the existing ones for effective implementation of services.

2.1 Objectives of ART Centres

One of the key objectives of NACP is to provide care, support and treatment to all PLHIV. With this objective in mind various service delivery points like CoE, ART centres, ART Plus centres, LAC, LAC plus and CCC have been established and are being expanded in a need based manner.

The main objective of Anti-retroviral Therapy (ART) Centre is to provide comprehensive package of Care, Support and Treatment services to persons living with HIV/AIDS (PLHIV). The specific objectives of an ART centre are to:

- 1) Register and provide Care, Support and Treatment services to all PLHIV and monitor patients in HIV care (Pre- ART) regularly
- 2) Identify eligible PLHIV requiring ART and initiate them on ART in a timely manner as per the NACO guidelines
- 3) Provide ARV & OI drugs to eligible PLHIV
- 4) Provide treatment adherence and counselling services before and during treatment to ensure high levels of drug adherence
- 5) Counsel and educate PLHIV, care givers, guardians and family members on nutritional requirements, hygiene, positive living and also on measures to prevent further transmission of infection
- 6) Refer patients requiring specialised services (including admission) to other departments/higher facilities/ CoE
- 7) Provide comprehensive package of services including condoms and prevention education with a view towards "Positive Prevention"
- 8) Ultimately integrating HIV care into general health system for long term sustainability.

2.2 Functions of ART Centre

PLHIV should be given holistic care at ART centres. This is possible only if the team at the centre is committed and has a comprehensive understanding of the programme. Functions of ART centre can be categorised as medical, psychological, social and programmatic as indicated below:

2.2.1 Medical Functions

- 1) To monitor, manage and follow up Pre ART patients
- 2) To screen PLHIV for HIV-TB co-infection for early diagnosis of TB and appropriate linkages with the RNTCP
- 3) To diagnose and treat Opportunistic Infections including primary and secondary prophylaxis as per the guidelines.
- 4) To provide baseline investigations and CD4 cell count
- 5) To screen PLHIV for clinical eligibility and to initiate ART as per NACO ART guidelines
- 6) To provide ART to eligible PLHIV and counsel them on 100% adherence to therapy for long term effectiveness of ART
- 7) To monitor patients on ART and manage side-effects, IRIS etc (if any)
- 8) To facilitate easy access to specialist care as and when necessary
- 9) To provide in-patient care as and when necessary
- 10) To refer patients suspected for drug toxicity and/or treatment failure to SACEP for review and initiation of alternative first line or second line ART, if eligible
- 11) Sample collection and transportation to reference lab for Whole Blood sample (WBS) for confirmation of status of children below 18 months found reactive for HIV with Dried Blood Spot (DBS) testing/ rapid test and initiation of ART in eligible children as per paediatric ART guidelines
- 12) To provide appropriate intervention for PPTCT as per the National guidelines on PPTCT (both technical and operational)

2.2.2 Psychological Functions

- 1) To provide psychological support to PLHIV accessing the ART centre
- 2) To provide counselling to "Pre ART" and "On- ART" patients on regular follow up visits and CD4 testing
- 3) To provide counselling for adherence to ARV drugs and issues related to toxicity
- 4) To educate PLHIV on proper nutrition and measures to prevent further transmission of infection
- 5) To educate patients on sexual health and positive living
- 6) To advice for risk reduction behaviour including usage of condoms
- 7) Encouraging, educating and counselling to help patients to disclose the HIV results to Spouse/ children/family/care giver.

2.2.3 Social Functions

- 1) To encourage and help PLHIV to access various welfare schemes provided by different ministries/ departments of government and accredited social entitlement schemes
- 2) To facilitate linkages between other service providers and patients like educational help for the children and income generation programmes etc
- 3) Helping them in accessing legal help when need arises
- 4) To facilitate linkages between other Governmental and Non Governmental Organisations and service providers like CCC, DIC, STI, DOTS, NGOs, etc.

2.2.4 Programmatic functions

- 1) Tracking of “On-ART” LFU/MIS cases in co-ordination with DAPCU/CCC/ICTC/DIC/DLN members/ Link Workers/Outreach Workers and other Governmental and Non Governmental Organisations
- 2) Tracking of “Pre ART” LFU/ MIS in co-ordination with DAPCU/CCC/ICTC/DIC/DLN members/ Link Workers/Outreach Workers and other agencies.
- 3) It should be ensured that a line list is maintained for patients who are eligible for ART but not initiated yet.
- 4) To work in close coordination with the ICTCs to ensure that all the patients detected positive at ICTC get registered at the ART centres.
- 5) To assess the HIV status of spouse and children through ICTC and link them to CST services
- 6) To sensitize the hospital staff on universal work precaution, PEP, ART, medical waste management and other CST services through education and training
- 7) To work in close coordination with the RNTCP to ensure that all the patients with HIV/TB co infection are registered at the ART centre and started on ART.
- 8) To establish functional linkages with ICTC and PPTCT centres, and respond to the needs to be addressed at ART centre
- 9) Participation in operational research, mentoring the LAC, LAC Plus centre and other health care facilities.

2.3 Selection Criteria for ART Centre

The following criteria are used to set-up ART Centres in Government Sector, Public Sector Undertakings and Non-government organisations:

- 1) Districts/Regions with HIV prevalence
- 2) Districts/ Regions with high HIV sero-prevalence at ICTCs (> than 500 positives detected over the last five years in the catchment area)
- 3) Geographic distribution of existing CST facilities in states and their catchment area to be considered while proposing new ART centres
- 4) Proposed site should be accessible and well connected by public transport
- 5) Sites for centre to be carefully mapped to avoid any duplication of facilities
- 6) The above criteria may be relaxed in hilly terrains, desert areas, tribal regions and other areas with difficult accessibility
- 7) LAC/LAC Plus centre with high patient load can be considered for ART centre subject to availability of basic minimum infrastructure and other facilities
- 8) Capacity of the institution where ART centre is proposed, to be assessed after site identification
- 9) Services provided and human resource available in critical departments in the hospital (Medicine, Microbiology, Obstetrics & Gynaecology, Paediatrics, Dermatology /Venereology) to be taken into consideration
- 10) Availability of adequate space (as per ART operational guidelines) for setting up ART centre within the hospital campus, preferably in/near Medicine OPD
- 11) Willingness to assign minimum one faculty from Departments of Medicine, Paediatrics, Obstetrics & Gynaecology and Microbiology to support the ART centre on a daily basis and also involve other faculty members/residents in the functioning of the centre

- 12) Willingness and preparedness to provide necessary investigations (except CD4 and Viral load, if required) free of cost to the PLHIV and the basic drugs for the treatment of OI available in the hospital pharmacy and essential drugs required for dealing with the side effects of ART
- 13) Agreeing to follow ART technical and operational guidelines prescribed by NACO
- 14) Commitment to regularly provide information on facilities, services and outcomes in prescribed formats to SACS and NACO. Usually, the sites for ART centres are selected during the formulation of the Annual Action Plan for states (AAP) but can be considered at any time based on need/justification.

2.4 Steps for setting up ART Centres

Provisional identification of the site for setting up ART centre is done while finalising annual action plan for the state. The steps for setting up new ART centre are discussed below.

Note: The steps from number 7-14 are to be done simultaneously and not sequentially. However it should be ensured that time interval between the recruitment of contractual staff and operationalisation of the centre is not too long. For example if refurbishment is likely to take long time, the staff should be appointed close to the time it is likely to be completed.

Meanwhile if the staff has been appointed and trained and centre not ready, the staff should be deputed to a nearby centre for hands on training. .

Activities	Responsibilities
Step 1. Identification of the proposed site for the new ART Centre (during AAP planning)	SACS/ Discussion with NACO
Step 2. Provisional sanction (during April every year as per AAP)	NACO
Step 3. Meeting between SACS, Dean/Med. Superintendent , HOD (Med.) of proposed ART centre and Regional Coordinator (CST), NACO to identify the space for centre and to constitute ART team	SACS/RC/ Institution RC to initiate and facilitate the process
Step 4. Feasibility visit of the site by an expert team constituted by SACS in consultation with the RC and approved by NACO	NACO
Step 5. Submission of feasibility report in prescribed format to NACO	Expert Team
Step 6. Issue of final sanction after examination of feasibility report at NACO	NACO
Step 7. Opening a bank account and release of funds to the centre by SACS (for initiating refurbishment etc)	Institution/ SACS
Step 8. Training of ART team (multidisciplinary faculty team)	NACO/SACS
Step 9. Recruitment of contractual staff at ART centre (By Steering Committee at the institution as per operational guidelines for ART centres)	Institution / SACS
Step 10. Refurbishment of ART centre	Institution
Step 11. Training of all contractual staff recruited	NACO/SACS
Step 12. Supply of CD4 machine/Linkage plan.	NACO(Lab Services)
Step 13. Linkage with NACO CMIS & supply of M&E tools	NACO & SACS

Activities	Responsibilities
Step 14. Visit to ART centre after final sanction, recruitment of staff, refurbishment has been done	RC/SACS
Step 15. Supply of ARV drugs to new centres	SACS/Supply Chain
Step 16. Operationalisation of ART Centre	Institution/SACS
Step 17. Centre to be declared functional (after receipt of first report in CMIS at NACO)	M & E (CST), NACO

2.4.1 Feasibility Assessment for ART centres

A feasibility assessment team comprising of officers from NACO/SACS and one ART expert visits the identified site after the provisional administrative sanction is issued for setting up new ART centre. The team is finalised by RC/SACS with the approval of NPO (ART), NACO. The team assesses feasibility of starting the ART centre on the basis of check-list on parameters given at **Annexure 3**. The feasibility report is then submitted to NACO for the issuance of final sanction on examination of the report. The SACS has to ensure that a copy of the ART operational guidelines is sent to the identified institution before conducting the feasibility visit. The institution should appoint HOD Medicine as nodal officer for ART (or a senior faculty member from Dept. of Medicine nominated by HoD). The identified nodal officer should be telephonically briefed by RC/SACS on the purpose of visit so that probable sites within the hospital for the centre are identified prior to visit and the meeting of all faculty members nominated to be part of “ART team” also happens during this visit. The feasibility team shall visit the site at the institution on a pre fixed date. They will also meet the Dean/MS and the multidisciplinary team besides visiting the proposed site for ART centre. Written consent of the institution for rolling out of ART services in accordance with the operational and technical guidelines needs to be taken. Space, commitment, availability of free investigations and hospitalisation without discrimination are key criteria for approval by the team.

2.4.2 Preparedness of Institution

Once final sanction is accorded to an institution to establish an ART centre, the team of 10 (or more) faculty members from the Departments of Medicine, Paediatrics, Obstetrics & Gynaecology, Surgery, Microbiology, Biochemistry, Pathology, Chest & TB, Surgery, Community Medicine and Dermatology (and/or Venereology) constituted by the hospital during feasibility visit is deputed for a 4-days training at one of NACO designated ART training institutes. In case of ART centres in district hospitals and other peripheral health facilities, the number of specialists in the team can be relaxed to 5-6. The team is to be headed by the Nodal Officer of ART centre. The nodal officer is either the Head of Department of Medicine (or a senior faculty of the department of medicine, designated by the HOD as the Nodal Officer). In case of district hospitals, senior most Physicians will be the nodal officer. In case physician is not available, paediatrician may be considered to be the Nodal Officer of the ART centre at such facilities. Medical Officers and other contractual staff appointed in the ART centre will also undergo induction training at NACO designated ART training institutes. The RC or CST official at SACS shall visit this site again and inform NACO if the centre is ready to start functioning. The format for submission of this report is at **Annexure 4**.

2.4.3 Support from the institution

ART centre is an integral part of the institution and the hospital administration should provide support for day-to-day functioning of centre and maintenance of hygiene etc as is done for other departments or sections of the hospital. There is no separate provision for cleaning staff/attendant from NACO/SACS and this is responsibility of the institution. The level of hygiene and cleanliness of the ART centre should be of the highest standards, keeping in mind the lowered immune status of people living with HIV/AIDS

All laboratory investigations, other than CD4 and viral load estimations (when required), shall be done free for PLHIV from the health facility where the centre is located, with support from State Health Department. No additional funds will be provided from NACO for baseline investigations. The OM in this regards is at **Annexure 5**.

It is of utmost importance that the ART centre is run with positive and synergistic team spirit. While job responsibilities outlined in these guidelines are desirable in an ideal situation, the Nodal Officer can redistribute the tasks in a given situation and specific requirements in a manner that would improve the quality of services provided by the centre.

2.5 Infrastructure

2.5.1 Location and Access to ART Centre

The ART centre should ideally be located near the Medicine OPD. If this is not feasible, a suitable place should be identified within the same campus which is accessible to patients keeping in mind cross-referral to and from various departments. Signage depicting directions to the ART centre should be clearly placed in the institution at strategic locations, including ICTC, so that there is no difficulty in locating the centre within the hospital. Such Signage's shall be designed and put in place by the SACS/ART centre at strategic points. All signages should have ART logo "We Care For You" in the board.

2.5.2 Space for ART Centre

A minimum of 1000 square feet area is required for an ART centre expecting on an average 500 patients on ART. However, more space needs to be identified in the beginning itself if anticipated patient load is more than 500. This anticipation needs to be done at the time of feasibility visit and required area to be identified in the beginning in order to avoid congestion in the centre later on. Scope for further expansion of the centre should also be considered while selecting the sites. A sample floor plan for ART centre for upto 500 patient load is placed at **Annexure 6**. It should have adequate number of rooms/ cabins each measuring at least ten feet by ten feet (10' x 10') for the following staff/services listed below:

- 1) Examination room: for Medical Officer to examine the patients (1 for each MO)
- 2) Counselling Room: for individual, group and family counselling (1 counsellor per room)
- 3) Pharmacy: for stocking ARV & OI drugs with a window or counter for dispensing the drugs. The medicines should be stored in a manner that is safe from theft, direct sunlight, exposure to moisture, rodents and other factors that could harm or destroy the drugs. Ideally these should be stored in hospital store and indented on monthly/ need based manner
- 4) Laboratory: for collection and storage of samples and carrying out tests by the lab. technician
- 5) Office Space: for registration, record keeping and data entry by Data Manager

- 6) Waiting Area: There should be adequate area where patients and accompanying persons can wait and where group counselling can also be conducted. Television and other audio-visual facilities should be installed here for educational purposes. IEC material should also be displayed in this common waiting area. Attention should be paid to avoid the air borne infection by adequate ventilation/windows etc
- 7) Adequate space should be individually identified and provided for different ART centres taking into consideration the need of the particular centre
- 8) It must also be ensured that adequate toilet facility is made available for the clients visiting the centre
- 9) Provision for clean drinking water also needs to be ensured.

The ART centre should be kept neat and tidy and should maintain highest standards of cleanliness and hygiene, have proper ventilation, lighting, electric supply and water supply for effectively carrying out examination, counselling, laboratory tests and record keeping while helping to prevent the spread of nosocomial infections.

2.5.3 Furniture and general equipment

The ART centre should be furnished adequately from the grant to the ART centre as per the financial guidelines discussed in the finance section and must have the following:

- 1) Tables, chairs and other seating facilities for staff and patients
- 2) Examination table with side screens, pillow, rubber sheet etc
- 3) Office shelves for supplies, records and stationery, drugs storage, etc
- 4) Appropriate furniture for computer and printer and office stationaries
- 5) Secured cupboards for storing patient records, ARV drugs and other medicines, laboratory kits, consumables and other equipment. These cupboards should have locks to prevent theft of material and data
- 6) Waste disposal systems

These items are to be initially procured from the one time grant of Rs. 2 lakhs provided to ART centre at the time of establishment. Any subsequent requirements can be met out of the savings from the annual operational grant.

2.5.4 Medical equipment and accessories

A set of general medical equipment like a weighing machine, height measurement pole, blood pressure (BP) apparatus, stethoscope, tuning fork, hammer, torch, tongue depressor should be available for each medical officer at the ART centre. Ophthalmoscope, pulse oxymeter, digital camera can also be purchased. These items should ideally be provided by the hospital but if not possible, then can be purchased from the one time grant as well as the recurring grant for the centre. All these items should be entered in the Fixed Asset Register available with the data manager at the ART centre. ART centres are not allowed to purchase EPABX, photocopier, and laptop. In addition, IEC material such as models and charts, demonstration and counselling aids, such as a penis model for condoms should be made available at the centre by the SACS.

2.5.5 CD4 machines

Each ART centre should have access to CD4 tests either directly or by a clear linkage mechanism for conducting regular and uninterrupted CD4 counts at a designated centre. The centre must follow the instructions on collection and transport of samples (and not patients) from testing site to the identified site where the test is to be conducted. The reagents and other consumables needed for CD4 test would be procured by NACO and supplied to the centres. The machines should be utilised optimally to ensure that there is minimal waiting period for CD4 test. All PLHIV in "Pre ART" and "On ART" should get the CD4 count done at least once in six months or more, if required clinically.

2.5.6 Computers and accessories & Audio – Visual Equipment

All ART centres are provided with funds for the procurement of a desktop computer in the initial one time grant. This computer should conform to currently acceptable specifications and should include a reliable chipset, I3 or higher with clock speed of 2.4 Ghz or higher motherboard, at least 4 GB of RAM, 320 GB of hard disk space, a fifteen inch p LCD colour monitor, a keyboard, optical scroll mouse, a DVD reader cum CD/DVD writer, an appropriate cabinet with power supply & inbuilt speakers, four to 6 USB ports, a UPS capable of giving necessary power back up of minimum 30 minutes and a built in modem and MS Office and Nero writer software and preinstalled genuine windows. In addition, computer peripherals should include a laser printer (black and white), a scanner and a broadband (or other, if broadband is not available in the concerned town or city) internet connection. Expenditure on Internet connection including recurring expenses can be incurred out of the operational cost provided to the ART centre every year. An external hard disk of at least 500 GB should be purchased by the centre from the operational grant for keeping a back up of all data stored in the computer.

Apart from all these the following free software's should also be available

- 1) WinRar (freeware)
- 2) Team Viewer (freeware)
- 3) PDF reader (freeware)
- 4) Antivirus (freeware)
- 5) Browser (Internet explorer, Firefox, Google chrome.)

Additional computer can be procured from annual recurring grant when ever second data manager is appointed. For educational purpose, a TV and a DVD player should be procured and installed in the Group-Counselling Room /Waiting Area. This should be procured from initial one time non- recurring grant. The CD/DVDs shall be provided by NACO/SACS.

2.5.7 Communication Tools

Apart from internet connection, ART centre should have phone connections for external and internal (hospital) communication. The phone number and email of the centre should be displayed at a prominent place in the waiting area.

2.5.8. Final Operationalisation of ART Centre

The ART centre after initial preparatory work like refurbishment of the centre, purchase of furniture, recruitment & training of contractual staff, supply/linkage of CD4 machine etc. have been done shall be again inspected by RC/ or a SACS official. Only after receiving a satisfactory report from the team, the centre shall be supplied with ARV drugs and declared as functional after submission of first monthly report.

2.5.9 Display of Information

Proper display of the following in the ART centre should be ensured:

- 1) The ART logo "We Care for You" at the entrance of the centre
- 2) Name and designation of all the staff in the centre including nodal officer
- 3) The timings of the ART centre along with list of holidays displayed in bold letters in local languages
- 4) List of facilities/ services available in the ART centre
- 5) The list of nearby ART centres, LACs, LAC plus centres, CCCs , DICs and other facilities under the National AIDS Control Programme in the institution
- 6) Information on fast tracking of cough symptomatics, pregnant women and children
- 7) Request patients to report to the ART centre in case of change of contact details
- 8) The SACS shall prepare standard boards for display of such information at all ART centres. Some standard drawings are available at NACO and can be asked for by SACS
- 9) Information regarding various welfare schemes provided by different Government departments and other agencies to PLHIV
- 10) IEC materials developed by NACO/SACS related to care, support & treatment and other services
- 11) Instruction to the patients to report to the "Emergency" in case of any complication/emergency situation

2.5.10 Installation of Complaint/ Suggestion Box

A complaint/ suggestion box must be installed in the ART centre. It should be opened in the presence of the nodal officer weekly. All grievances that can be resolved locally must be disposed at the centre itself. Serious or unresolved issues, if any, must be referred to/taken up in the State Grievance Redressal Committee (SGRC). A register should be maintained where in all complaints received and action taken should be entered. PLHIV Network/ DLN members should be involved in the meetings for review of grievances at the centre.

2.5.11 Working Hours & Holidays

Working hours for ART centre are from 9 am to 4 pm or (8:00- 3:00 pm) with a lunch break for half-an-hour. In case the OPD closes at 2 PM, the ART centre should still be open till 4 PM for updation of records. All records should be completed on the same day after disposal of patients. If the hospital follows two time OPD split timings (like Gujarat, Rajasthan), ART centre timings should be aligned with those timings but the total working hours should not be less than 7 hours. The ART centre will observe same holidays as the medicine OPD of the institution. The ART centre shall remain closed on Sundays and other gazetted state holidays. In states where medicine OPD is open on public holidays also, ART centre should also be open and half of the staff should be present at the centre (on rotational basis).

2.6 Human Resources

2.6.1 ART Team

All institutions with ART centre are requested to constitute a multi disciplinary ART team headed by the Head of the institution (Dean/Principal/Medical Superintendent/CMO). It should consist of trained faculty from the departments of Medicine, Pediatrics, Microbiology, Obstetrics & Gynaecology, Biochemistry, Community Medicine, Surgery, Psychiatry, TB-Chest, Dermatology and Venereology. This team should meet atleast once in two months under chairpersonship of head of institution (Dean/ Superintendent) and discuss the functioning of the ART centre and other relevant cross cutting issues. The nodal officer of ART centre should ensure that this meeting is convened once in two months regularly.

2.6.2 Recruitment process for ART Centre staff

The ART centres are provided with contractual staff to support day to day functioning of the centres. For these contractual appointments, SACS should give an open advertisement in local newspapers in consultation with the concerned institution. Applications should be received at the institution and should be followed by interview of eligible applicants by the Steering Committee of the concerned institute to select the most suitable candidates. It must be clear that these appointments are not to be made by SACS centrally and it is responsibility of the institution concerned. And since these appointments are to be made by institution, these are not transferable from one centre to another. The day-to-day administrative control of contractual staff lies with the nodal officer and the institution. However the staff is also accountable to the CST in charge at SACS and RC and should respond to the directions/guidance by them from time to time.

A Steering Committee should be constituted at the institution where the ART centre is located. The institutional head (Dean/ Superintendent) should head this committee. The Nodal Officer of the ART centre will be the Member Secretary of the steering committee and RC/SACS representative will be special invitee. This committee is the authority to make all contractual appointments/ renewal of contracts for the ART centre.

For the post of SMO/MO, walk-in interview can be conducted on the date specified in the advertisement. For other contractual positions, if the number of applicants for a particular post is more than 10, a written test can be conducted. Aptitude of candidates should be given due weightage in the selection process. The institution shall send the list of selected candidates to the SACS for their information. However, appointment, performance appraisal and contract renewal will be done by the institution every year. All contractual appointment shall be made on yearly basis. A Contractual Service Agreement (CSA) shall be signed between the institution and the concerned staff (**Annexure 7**). For contractual staff, an annual appraisal system based on PMDS has been devised based on which continuation should be decided (**Annexure 8**). Performance based incentives can be given to the contractual staff based on existing NACO norms on renewal of the contract. The steering committee can also terminate the appointment at any time with due notice/ salary for notice period if a situation arises for it. The vacancy created due to this should be filled up from either "wait list" of candidates (valid for 1 year) or through a fresh recruitment protocol as mentioned above. The maximum age limit for filling up of contractual positions has been raised to 65 years subject to condition that two attempts for selection of candidates with 62 years age limit fail

The leave entitlement of ART contractual staff (mentioned in the Contractual service agreement is as follows: Annual Leave / Accrued leave: 30 days per annum (2 ½ days per month) and sick leave 10 days per annum.

To avoid delay in salary disbursement, SACS will send the salaries directly to the account of ART centre staff through e-payment. Hence, the ART centre should send the attendance/leave record of each contractual staff in ART centre to SACS on a monthly basis.

2.6.3 Staffing Pattern for ART centres

All ART centres are provided with manpower in proportion to the number of patients on ART at each centre. However, manpower structure for ART centres will be periodically reviewed and revised by NACO based on the increase in patient load and other requirements in the programme. (SACS/ Institutions are advised to follow the instructions of NACO in this regard from time to time). Currently approved staffing pattern for ART centre is as follows:

Position	Number of Patients on ART					
	500	500-1000	1000-2000	2000-3000	3000-4000	4000 & above
SMO	1	1	1	1	1	1
MO	0	1	1	2	2	2
Lab Technician*	1	1	1	1	1	1
Counsellor	1	2	3	4	4	4
Pharmacist	1	1	1	1	1	1
Data Manager	1	1	2	2	2	2
Staff Nurse	1	1	1	1	2	3
Inst. Nurse	1	1	1	1	1	1
Care Coordinator	1	1	1	1	1	1

(*Additional lab technician to be appointed in centres with FACS Calibur CD4 machines performing >1000 tests per month and in centres with FACS Count CD4 machines performing > 500 test per month.)

2.6.4 Human Resources & their Job Responsibilities:

2.6.4.1 Nodal Officer of ART centre (Head, Dept. of Medicine/ another faculty member nominated by the HOD)

- 1) Overall responsibility of the functioning of the ART centre, reporting to NACO, participation in review meeting, coordinate and develop referral system and linkages with other departments of the hospital
- 2) Ensure that PLHIV are not discriminated in the hospital and are not denied admission/ care
- 3) All administrative matters relating to the centre including sanctioning of leave of contractual staff, annual performance appraisal of the staff etc as per NACO guidelines
- 4) Establish links with other facilities developed under NACP, NGOs, Positive Network Groups etc
- 5) Ensure adherence to the highest standards of quality and excellence in patient care
- 6) Review and monitor the functioning of the centre periodically and in depth and ensure submission of reports as required. Once in a week the Nodal Officer should sit with the ART staff to review the functioning of the centre, record completion, computerization, etc. Also meetings should be minuted and adequate action be taken as per the minutes
- 7) Scrutinize the monthly ART centre report, approve it and send to NACO. Also ensure that the NACO softwares are properly installed and working on the computers at the ART centre

- 8) Mentor and monitor the functioning of LACs attached to the ART centre. For monitoring and mentoring, staff from Nodal ART centre should visit the Link ART centre and the TA/DA for the same shall be paid from the operational costs provided at the ART centre as per the NACO/ SACS norms
- 9) Sign all documents related to referrals to SACEP at CoE/ ART plus centres
- 10) Ensure posting of other faculty members and resident doctors in the department to ART centre on rotation basis in order to ensure that every member is oriented in the functioning of the centre. A roster indicating name of faculty deputed on day to day basis and PG students rotation to ART centre should be prepared every month and displayed at the centres
- 11) Ensure multidisciplinary ART team meeting once in two months under the supervision of Head of the institution
- 12) Conduct annual performance appraisal of contractual staff based on PMDS format
- 13) To make suitable alternative arrangement in consultation with the concerned SACS when female contractual staff proceeds on maternity leave. As an alternative arrangement, suitable candidates can be appointed on locum basis.
- 14) All ART centres should have a attendance register where all staff should sign daily at the time of coming and leaving along with time
- 15) After verification of the attendance from the register, attendance to be sent to the concerned SACS
- 16) Physical verification of the ARV drug stocks (once in 3 months) and signatures in stock register
- 17) Review the actions initiated on the complaints received in the complaint box from the PLHIV every fortnight
- 18) Focal point for interaction with NACO/SACS/CoE etc
- 19) Act as a team leader to constantly guide and mentor the ART staff (Medical Officers, Counsellor, Laboratory Technician, Staff Nurse, Pharmacist and Data manager).

2.6.4.2 Senior Medical Officer (ART Centre)

The eligibility criteria to be followed while appointing SMO for ART centre are as follows:

- ◆ First preference should be given to candidates with MD in Medicine or any other clinical discipline
- ◆ If no candidate as per para 1 above is available, candidates with MBBS + Diploma in any clinical discipline having minimum 3 years of experience can be considered
- ◆ In the event of unavailability of candidates as per para 1 & 2 above, candidates with MBBS + Fellowship in HIV Medicine/Diploma in Public Health having 3 years of experience can be considered for the post of SMO.

However, each and every proposal for relaxation of qualification as explained at para. 3 above should be sent to the Project Director of the concerned SACS for approval provided that two earlier attempts failed to recruit SMO with qualifications as indicated at para 1 & 2 above. The same may be intimated to the head of CST Division at NACO.

Incase SMO cannot be recruited due to non- availability of qualified candidates, an MO can be recruited in place of SMO (and be given the salary of MO).

Job responsibilities of Senior Medical Officer (SMO)

- 1) He/she is the functional team leader of the ART centre under the overall guidance of the Nodal officer. The SMO has to supervise the administrative and medical functions of the ART centre on a day- to- day basis and provide leadership to staff to work as a cohesive team and deliver the services effectively
- 2) He/she should examine the patients, advise required investigations including CD4 count, review the investigations and prescribe the treatment. It includes referrals to other departments for treatment of TB, STI, OIs, etc
- 3) Refer difficult/ complicated cases to the Nodal Officer or other specialist for further expert opinion and interventions including admission and inpatient care, if required
- 4) He/she must also coordinate with LAC, LAC plus and CCCs attached to the ART centre and ensure optimal utilisation of such facilities
- 5) Monitor the consumption and availability of ARV, OI and other drugs, CD4 kits, other consumables and alert the concerned authorities in case of impending shortage well in advance so as to enable adequate replenishment without disruption of ART care and support to PLHIV
- 6) H/she must ensure that all records, registers, cards and PLHIV software are updated on a daily basis and reports are sent to the concerned authorities on time. All reports should be checked by the SMO before taking approval from the Nodal Officer for sending them to the concerned authorities
- 7) He/she must update the prescribed columns in white cards and green books
- 8) He/she must attend or ensure appropriate representatives are sent for monthly coordination meetings held at the district level, ART centre-CCC coordination meetings. The SMO must attend review meetings by NACO/ SACS and training programs conducted for medical officers
- 9) He/she has to ensure that the guidelines for running and maintaining the ART centre are abided by
- 10) He/she must be aware of all communications sent from NACO/SACS to the ART centre and should update the nodal officer about them on a day to day basis
- 11) He/she has to verify the staff attendance register daily and get it approved by the Nodal Officer at the end of the month before forwarding the attendance to the SACS
- 12) The SMO must appraise the annual performance of the contractual staff based on the PMDS format which should then be approved by the nodal officer
- 13) The SMO should also monitor the linkages with the various NGO's and other networks
- 14) Responsibilities in respect to Link ART centres/ LAC plus
 - a) H/she has to mentor and monitor the functioning, recording and reporting of LAC/LAC plus along with the Nodal officer
 - b) H/she has to follow out referral and in- referral of patients and communicate with the Link ART centre
 - c) H/she has to take decision to link out willing patients to the nearest LAC based on eligibility criteria
 - d) H/she has to do the clinical review of patients referred back to the nodal ART centre from LACs.

15) Responsibilities in respect to SACEP Referrals

- a) The SMO has to refer “suspected treatment failure” cases to the SACEP at the COE/ART plus for screening and initiation of alternative first line/second line ART, if required. The nodal officer of the ART centre must countersign all such referrals
- b) Focal Point for EID for HIV exposed babies found “Reactive” with DBS at ICTC and referred to ART centre
- c) Any other duty assigned by Nodal Officer/ SACS pertaining to ART services.

2.6.4.3 Medical Officer (ART Centre)

The ART Medical Officer (MO) should essentially be an MBBS trained by NACO at one of the NACO designated training centres. The MO, in the absence of the SMO, will look after all his/her tasks and responsibilities and ensure the proper running of the ART centre. Routinely, the MO should support the SMO in ensuring appropriate care and quality services to PLHIV on ART as per the guidelines and standards set by the national programme.

Job responsibilities of Medical Officer (MO)

- 1) He/she has to work under the guidance and supervision of the SMO/Nodal Officer
- 2) He/she should examine the patients, advise required investigations, including CD4 count, review the investigations and prescribe the treatment (this includes ART, referral to other departments such as RNTCP centres for treatment of tuberculosis, treatment of STIs and prophylaxis and/or treatment of opportunistic infections)
- 3) Refer the cases to the Senior Medical Officer, Nodal Officer or any other specialist for further expert opinion and interventions including admission and inpatient care, if required
- 4) He/she must also coordinate with the CCCs and LACs attached to the ART centre. Ensure drug adherence and counsel the patient towards safe sex, condom usage, proper nutrition and positive living
- 5) Monitor the consumption and availability of ARV drugs, OI drugs, CD4 kits, other consumables and appraise the Senior Medical Officer for making necessary arrangements and check the ART Drug store and sign in the register every fortnight
- 6) He/she must update the prescribed columns in White cards and Green books and should assist Senior Medical Officer in supervising the staff at the centre, record keeping and reporting
- 7) He/she must attend the Monthly coordination meetings held at the district level, ART – CCC coordination meetings, review meetings by NACO / SACS and attend training programs conducted for the Medical Officers, whenever deputed
- 8) He/she has to ensure that all the guidelines for running and maintaining the ART centre are abided by
- 9) In case SMO is not there, he/ she is the focal point for EID for HIV exposed babies found “reactive” using DBS at ICTC and referred to the ART centre
- 10) Besides all the above, any other duty assigned by ART Centre In-charge pertaining to ART services.

2.6.4.4 Counsellor

Qualification: He/ she should hold a Masters degree in Social Work (preferably specialized in medical & psychiatric social work). If no candidate with the above qualification is available candidates with degree in sociology may be considered. Qualified and competent PLHIV, if available, should be given preference while appointing counselors. Alternatively, a qualified graduate nurse can be appointed as counselor but he/she must undergo 12 days counselor training at NACO designated institute.

Job responsibilities of Counselor:

- 1) He/she has to work under the guidance and supervision of SMO/MO/ Nodal officer
- 2) He/she must assess / assist the staff nurse in triaging the new patients eligible for Pre-ART registration and refer others to the nearest ICTC for confirming HIV status
- 3) Complete the Pre-ART registration (HIV care) register, white cards and green books) on first visit of the PLHIV and provide adherence counseling
- 4) Counselor to maintain the HIV exposed/ infant child register
- 5) Provide necessary counseling on subsequent visits to the "Pre ART" patients and adherence counseling to "On ART" patients
- 6) Referral and linkages with other community based organizations, rehabilitation centres and various support groups
- 7) Address issues related to ARV treatment:
 - I. Pre ART or treatment preparedness exercises, encourage and help in finding guardian Support
 - II. Explain the details of treatment and its importance, including side effects of ARV drugs
 - III. Adherence counseling and monitoring, identification of barriers to adherence and suggestions to remove these barriers
 - IV. Pill counting for PLHIV on ART and assess adherence
- 8) Provide emotional, social, and psychological support to patients and/or direct them to the concerned person or organization that can do so
- 9) Explain to the patients, care givers, guardians and other family members about palliative and home-based care, hygiene and nutrition
- 10) Counsels patients on positive living, prevention proper condom usage; and dispense condoms
- 11) Complete the required sections in the recording and reporting tools maintained by the ART centre
 - I. Issue Green book for the first time to the new patients (Pre-ART)
 - II. Pre-ART Registers (fill in prescribed columns)
 - III. White Cards: (make white cards for all patients and fill in prescribed columns)
 - IV. ART Enrollment register: (fill in prescribed columns)
- 12) Counselors must ensure all the registers are filled appropriately and updated
- 13) Collect and update address of PLHIV
- 14) Counseling of Pre ART patients on follow up visits and repeat CD4 count. CD4 report of Pre ART patients is to be given by counselor after proper counseling
- 15) Follow up for testing of spouse and children of the PLHIV
- 16) Contact the MIS/LFU cases through telephone and outreach workers and bring them back to ART centre for drug collection
- 17) Attend ICTC counselors monthly meeting for feedback on ICTC- ART referral and LFU cases LFU cases

- 18) Provide counseling on family planning and breast feeding, particularly for pregnant women coming for PPTCT. The counselor should ensure appropriate advise and counseling to link the pregnant women to appropriate services including ANC and post natal services, immunization and EID for infant
- 19) In case of CoE's and ART Plus centres the counselors shall do the counseling of patients referred to the SACEP on rotatory basis
- 20) Besides all the above, any other responsibilities / instructions related to the programme given by the supervisors need to be discharged / followed from time to time.

2.6.4.5 Pharmacist

Qualification: The pharmacist should preferably hold a Degree in Pharmacy from a recognised institute. If candidate with degree is not available, diploma holder in pharmacy with 3 years of experience in health care institution can be considered. He/she must be registered in the concerned state pharmacy council. He/she has to undergo NACO training for ART pharmacists.

Job responsibilities of Pharmacist:

- 1) He/she has to work under the guidance and supervision of SMO/MO
- 2) Dispense ARV and OI drugs with proper counseling
- 3) Advise the patients and family about the importance of adherence during each visit
- 4) Counsel the patient on possible drug toxicities and report the same, if significant
- 5) Do pill count and report any adverse effects of drugs or any OIs. Also, confirm the next visit date given by the SMO/MO and inform the patient
- 6) Prepare a "Daily Due" list of patients who are scheduled for their appointment and provide the list of "MIS" patients to the counselor
- 7) Maintenance of the drug stores
- 8) Maintain and update drug stock and drug dispensing registers regularly every day. Inform the concerned medical officer in case of any discrepancy. Duly take his signature every fortnightly in the stock register
- 9) Ensure that the centre has enough stock of ARV drugs for at least 3 months and inform the concerned authority about any near expiry or excess stocks well in time for relocation to other sites and ensure FEFO protocol is followed
- 10) Physical verification of the drugs under the supervision of the nodal officer and the SMO
- 11) Facilitate transfer/ availability of ARV drugs at LAC as per the number of patients linked out to the LAC
- 12) Besides all the above, any other duty assigned by ART Centre In-charge.

In case pharmacist is not available/on leave, staff nurse shall do the job of the pharmacist.

2.6.4.6 Data Manager

Qualification: The Data Manager should be a graduate (preferably with Commerce background) with Diploma in Computer Applications (from a recognized institute or university) or 'O' Level course from DOEACC. He/she has to undergo training by NACO in monitoring and evaluation tools (M & E) of the programme aimed to build the capacity of the person in recording data, preparing and sending reports and maintaining records properly.

Job responsibilities of Data Manager:

- 1) He/she has to work under the guidance and supervision of SMO/MO
- 2) Ensure that all data recording and reporting software's are properly installed, functioning and updated
- 3) Print and share all circulars/information sent by NACO/SACS to the Nodal Officer/SMO and maintain a file for the important orders/communication
- 4) Maintain the attendance register for the ART centre staff and get it verified by the SMO/MO every day and by the Nodal Officer at the end of the month
- 5) Maintain the HR file including the bio-data of the staff, copies of certificates, appointment letters, contractual service agreement, performance appraisal report, training details, remuneration etc
- 6) Coordinate with the LAC/ LAC plus centres and ensure that all LAC/ LAC plus related tools are complete
- 7) Prepare and send all the monthly reports prescribed by NACO and SACS after approval of SMO/ Nodal Officer
- 8) Assist in analysis of data under the supervision of the Nodal Officer of the ART centre
- 9) Maintain the accounts of the ART centre and the fixed assets register
- 10) The two data managers at ART plus centre shall also function as the SACEP coordinator on rotational basis
- 11) Any other duty assigned by ART Centre In-charge.

2.6.4.7 Laboratory Technician

Qualification: The Laboratory Technician should be a graduate/diploma holder in Medical Laboratory Technology (MLT) from a recognised institute. He/she must be registered in the concerned state council. He/she should be trained by NACO in ART related laboratory work, including CD4 count testing.

Job responsibilities of Laboratory Technician:

- 1) He/she has to work under the guidance and supervision of SMO/MO
- 2) Collect the specimen for CD4 counts at the ART centre and take these samples to the Department of Microbiology, test them and give the report to the counselor at the ART centre. Also, collect whole blood samples for Early Infant Diagnosis for infants found reactive with DBS and carry them to identified EID labs
- 3) In case the ART centre does not have a CD4 machine or CD4 testing is not possible at the same centre due to any reason, the LT is expected to transport samples of blood to a linked CD4 laboratory and to collect the results when ready (TA/DA for this visit can be booked under operational cost of ART Centre as per NACO guidelines)
- 4) Prepare and provide CD4 monthly report to ART centre
- 5) Maintain the stock of the CD 4 kits, consumables and inform the ART SMO / In-charge MO / Nodal Officer of the centre as and when the stocks come to critical levels
- 6) Generate the "Due list" for CD4 testing for all the Pre-ART & On ART patients as specified under NACO norms
- 7) Address confirmation on CD4 test date every six monthly

- 8) In case the LT is on leave sample collection and transportation should be done by the staff nurse. In some situations where the staff nurse is unable to travel, then the staff nurse should collect the sample, pack it as per the protocols and the care coordinator or another staff under NACP shall carry the sample to the testing lab
- 9) The additional laboratory staff provided at select sites under the NACP can also be used for laboratory work
- 10) Any other duty assigned by ART Centre In-charge.

2.6.4.8 Staff Nurse

One or two nurses (depending upon the volume of patients) should be deputed to the ART centre by the hospital (institution) in addition to one contractual nurse supported by NACO (qualification can be the same as for the appointment of nurses in the hospital). Nurses play a very important role at the ART centre and their responsibilities include the following:

- 1) Assist in all the clinical and paramedical functions of the centre as per requirement
- 2) Perform baseline assessment of the patient including pulse, BP, weight, height etc
- 3) Assess the physical, social and psychological needs of the patient.
- 4) Provide need based nursing care and support to the patients
- 5) Focal point for all issues related to pregnant positive women and HIV exposed child and early Infant Diagnosis (EID) in case counselor not there
- 6) Maintain the daily OI summary sheet, compile it on monthly basis and give it to the data manager
- 7) Coordinating and tracking the referrals made within the hospital by establishing linkages with various departments and in-patient wards
- 8) Streamlining and guiding patients at the ART centre and helping in the efficient and orderly functioning of the centre
- 9) Assist in record keeping and maintenance of patient documents
- 10) Dispensing of ARV drugs in the absence of Pharmacist as and when required
- 11) Counselling of patients as and when required
- 12) Collection of blood samples for CD4 testing and arrange/perform its transportation to the linked lab during the absence of Lab technician as and when required
- 13) Provide reports to the doctor and other members of the ART centre multidisciplinary team
- 14) Ensure implementation of the UWP and proper waste disposal at the centre
- 15) To monitor and ensure the implementation of various infection control measures

Role of nurses at the ART centre in HIV-TB coordination:

- 1) Do regular screening of the patients for symptoms of pulmonary/extra pulmonary TB
- 2) The lab form given to the TB suspect to be stamped by the nurse with the ART centre stamp to facilitate fast tracking of the patient for sputum testing
- 3) Reinforce cough and hand hygiene practices among the suspects/diagnosed pulmonary TB cases
- 4) Keep a record of the patients referred from ART centre to Designated Microscopy Centre (DMC) for the diagnosis of TB with the help of line list. Co-ordinate with STS to ensure completion of the line-list
- 5) Attend the monthly RNTCP meeting along with the completed line list for the month to be shared with the concerned STS

- 6) Maintain the TB/HIV register at the ART centre ensuring timeliness, accuracy and completeness
- 7) Prepare and submit the monthly TB/HIV report to SACS through ART centre in charge.

2.6.4.9 Care Coordinator

Qualification: The Care Coordinator should be a PLHIV, with a minimum of intermediate (12th) level education. S/he must also have working knowledge of English and the local language

Job responsibilities of Care Coordinator:

- 1) He/she has to work under the guidance and supervision of SMO/MO
- 2) Be the first interface with patient at centre
- 3) Ensure entries in the HIV visit register
- 4) Be a peer educator for PLHIV at centre and provide psycho-social support to newly registered PLHIV
- 5) Provide assistance to PLHIV enrolled at the ART centre, within the hospital (OP and IP)
- 6) Coordinate with the linked Community Care Centre & Link ART Centres.
- 7) Keep track of drug adherence of patients on ARV, counseling them on the importance of regularity of visits and ARV dosage
- 8) Augment the efforts of the counselor and other staff of the centre in promoting positive living
- 9) Assist in patient retrieval, where necessary and as far as possible
- 10) Follow MIS/LFU cases on telephone, from "daily due list" as well
- 11) Transfer of kits / other consumables / blood sample to nearby CD4 Labs in absence of LT, if necessary. Emergency transfer of drugs to LAC/ other ART centre/ Home visit of LFU cases (TA/ DA for such visits can be booked under operational cost of ART Centre as per NACO guidelines)
- 12) Manage filing of the white cards on daily basis
- 13) Any other duty related to the programme assigned by SMO/MO

All these job responsibilities for ART staff are indicative and any additional responsibilities as per need can be allocated by the SMO with the approval of Nodal Officer. Any refusal by the staff to carry out duties beyond TOR shall be viewed seriously and necessary action be taken.

2.6.5 Capacity Building of ART Centre Staff

To ensure uniform standards of services, adherence to operational guidelines and treatment protocols, induction training is provided to various personnel using standard curriculum, training module and tools at identified institutions. Various training programmes organized for ART staff include:

- 1) Orientation of "ART team" members from the institution (4 days)
- 2) Training of Medical Officers (SMO/MO) of ART centres (12 days)
- 3) Training of counselors (12 days)
- 4) Training of data managers of ART Centres (3 days)
- 5) Training of laboratory technicians for CD4 testing (2 days)
- 6) Training of Pharmacists (3 days)
- 7) Training of nurses (6 days)
- 8) Refresher/ re-orientation programme for ART centre team

2.7 Financial Management

Funds required for running an ART centre are provided to each ART centre and are to be utilised as per guidelines.

2.7.1 Bank Account

The ART centre should open a separate bank account for management of funds. The account can be opened in the name of 'ART centre – XXXX (name of the institution)' to be operated jointly by 2 – 3 faculty members of the institution including Nodal Officer of ART centre. This is essential for proper and timely utilisation of funds made available to ART centre. Payment should be made by cheque except for small contingent expenses. A cash book will be maintained by ART centre to meet petty cash expenses. For this purpose, the nodal officer may draw imprest money not exceeding Rs. 5000 at a time.

2.7.2 Audit of Accounts

SACS will get accounts of each ART centre audited. Audited Statement of Accounts and Utilisation Certificate for the preceding financial year of each ART centre should be submitted to SACS with copy to NACO by 30th June each year. Further release of grants would be subject to submission of these documents.

2.7.3 Guidelines for Expenditure

ART centre would incur expenditure as per norms given hereunder:

Post	Current Salary range (Rs. pm)
Senior Medical Officer	32000 – 40000
Medical Officer	25000 – 30000
Lab Technician	8000 – 12000
Pharmacist	8000 – 12000
Counselor	8000 – 12000
Data Manager	8000—10000
Staff Nurse	8000 – 12000
Care Coordinator	4600
Contingency and operational cost per year (Telephone, internet broadband, stationery, printer cartridge, postal charge, local travel, etc.)	Rs. 1.5 Lakhs
Non recurring one time grant (Computer & accessories, TV & DVD, Furniture, Almirah, Storage racks)	2 lakh
Non-recurring one time grant for refurbishment of the centre	2.5 Lakhs
Annual recurring grant for Universal Work Precautions	0.5 lakhs

The salary of staff will start at the lowest range and then performance based incentive can be given yearly as per NACO norms revised from time to time. The salaries of all the staff members shall be sent directly by the SACS to the bank account of staff members by e-transfer. The operational and contingency fund/ universal work precaution funds shall be sent by SACS to the ART centres. The guidelines for expenditure are subject to change from time to time. The SACS/ART centres have to follow the latest instructions from NACO in this regard.

2.7.4 Recurring & Non-recurring Grant for CD4 Labs

One time non-recurring grant of Rs. 1 lakh is given to every new CD4 lab and a recurring grant as per the type of the machine is also given to every CD4 machine laboratory. A yearly recurring grant is given to all labs with CD4 machines as per the following norms; for Partec CD4 machine Rs 25, 000, for Count Rs 50,00 and FACS Rs 90,000. The details can be requested from laboratory services division.

2.8 Drugs

2.8.1 ARV Drugs:

All ART centres are provided with ARV drugs by NACO through their respective SACS. The number of patients for which drugs are supplied is estimated in consultation with SACS and RC's during the formulation of AAP. The drugs are generally procured annually and supplied in 2 – 3 instalments. The drugs required for all ART centres are supplied to respective SACS which, in turn, send it to the ART centres and monitor the same. All centres should ensure that they have a minimum stock of three months at their centre. In case of near expiry ARV/OI drugs stock that may not be consumed, the centre should inform SACS well in advance (4 month before expiry) so that necessary arrangement can be done to relocate the same. In case of shortage of drugs, information should be sent to the SACS, RC's and to NACO (artdrugs@gmail.com)

The drugs should be stored in the main pharmacy of the institution and shall be indented by the centre on monthly basis from the main store. The centre should utilize them following "first expiry first out" principle. Further details regarding drug storage and disposal are discussed in the chapter on Supply Chain Management.

2.8.2 Drugs for Opportunistic Infections

Drugs for Opportunistic infections should be available at all the ART centres. The common drugs that are required for the management of OI's are as below:

Drugs to be supplied by the Institution where ART centre is located		Drugs to be procured by NACO/ SACS and supplied to ART centres (funds to be provided by SACS if drugs are not supplied)		Drugs to be procured by SACS/centre as per requirement)	
1	Metronidazole 400mg	1	Nitazoxanide 500 mg	1	Fluconazole IV- 200 mg
2	Albendazole 400 mg	2	TMP-SMX DS 160/800mg	2	Acyclovir IV 250mg
3	Ciprofloxacin 500mg	3	Azithromycin 500mg	3	Inj.Gancyclovir 500mg
4	Prednisolone 10 mg	4	Fluconazole 150 mg	4	Cap.Gancyclovir 250 mg

Drugs to be supplied by the Institution where ART centre is located		Drugs to be procured by NACO/SACS and supplied to ART centres (funds to be provided by SACS if drugs are not supplied)		Drugs to be procured by SACS/centre as per requirement)	
5	Other common drugs like Paracetamol, Disprin, Anti-allergic, Anti-diarrhoeal, Antacids, etc.	5	Fluconazole 400mg	5	Itraconazole 200mg
		6	Clotrimazole ointment	6	Clarithromycin 500mg
		7	Clindamycin 300 mg		
		8	Sulfadiazine 500 mg		
		9	Inj Amphotericin B 50 mg		
		10	Acyclovir 400 mg		
		11	Cefotaxime 1g		
		12	Levofloxacin 500 mg		
		13	Cap.Amoxyclav 625 mg		

The Paediatric OI drugs should be procured as per the Paediatric technical guidelines on treatment.

2.9 Universal Work Precautions

Universal precautions should be followed by all people involved in patient care (like the doctors, nurses etc) and those handling blood and blood products (eg the lab technicians). Staff working in the blood collection room and laboratory should observe universal work precautions while handling blood and blood products. Gloves, disposable needles and syringes for drawing blood and puncture resistant containers for disposal of sharp instruments should be used. In addition, the safety kits consisting of plastic disposable gowns, disposable goggles, face mask, disposable shoe cover and two pair of long gloves should be available in all ART centres. Recurring grant of Rs. 50,000 per ART centre is given for purchase of commodities for universal work precautions. Gloves and face masks for staff and patients with cough are also to be purchased from these funds. A list of items that can be procured out of this grant is at **Annexure 9**.

2.9.1 Post Exposure Prophylaxis (PEP)

The health care providers have potential risk of getting occupational exposure to various blood borne infections. Occupational exposure refers to exposure to potential blood-borne infections (HIV, HBV and HCV) that occurs during performance of duties. The average risk of acquiring HIV infection after different types of occupational exposure is 0.3%. Appropriate post exposure management guidelines, therefore, form an important element of work place safety. Comprehensive medical management to minimise the risk of infection due to exposure to blood-borne pathogens (HIV, HBV, HCV) in Health Care Personnel (HCP) to be ensured. This includes counselling, risk assessment, relevant laboratory investigations based on informed consent of the source and exposed person, first aid, and depending on the risk assessment, the provision of short term (four weeks) of antiretroviral drugs, with follow up and support. Post exposure prophylaxis (PEP) is a standard protocol for preventing chances of getting HIV infection when a health care worker is exposed to a source patient known to be / possibly HIV-infected (i.e., occupational exposure). PEP aims to inhibit the replication of the initial inoculums of virus and thereby prevent establishment of chronic HIV infection.

PEP drugs are required on an urgent basis after accidental exposure and should be available and accessible round the clock. In all cases, the first dose of PEP should be offered as soon as possible, preferably within 2 hours, once the decision to give PEP is made. The basic PEP regimen (2-drug combination) should be made available from ARV drug stocks, in the casualty, OT, Labour Room, ICU and Emergency Ward.

The drugs for expanded regimen of PEP can be purchased from funds provided to ART centres for OI drugs and in states where OI drugs are provided by SACS, funds from contingency grant can be utilized. Efavirenz can also be used in expanded PEP and this is available at all ART centres.

2.10 Linkages and Referrals

Mechanisms for establishing linkages and referral systems are necessary to meet immediate and long-term needs of the persons enrolled in a comprehensive HIV care programme. PLHIV need a wide range of services during the course of HIV infection and stage of the disease. These needs are related to:

- 1) Physical health
- 2) Psycho-social and spiritual health
- 3) Nutrition
- 4) Financial stability and security
- 5) Quality of life

There is, therefore, need to develop linkages and referral systems to take care of these needs. Following steps would help in establishing linkages within a district/region:

- 1) Identification of organisations and facilities dealing with HIV/AIDS;
- 2) Mapping of such organisations in the district/region;
- 3) Consultation for setting up linkages and referrals systems including procedures and schedules; and
- 4) Evolving mechanisms for referrals and feedbacks.

The care coordinator/counsellor shall serve as focal points for dissemination of information regarding these services.

It is desirable if representatives of all the ART centres in the state meet regularly to discuss problems, if any, so that the referral system is made effective and user-friendly. Looking at the various needs of the PLHIV, linkages and referral system need to be set up with other departments within the institution where ART centre is located and with service providers and organisations outside the institution.

The ART centre team also needs to have regular meetings in order to identify and resolve programmatic issues.

2.10.1 Referrals within the Institute

For comprehensive care, people need access to various departments/services depending upon disease stage and occurrence of opportunistic infections. To facilitate effective referral system, the “ART team” constituted at the time of the establishment of the ART centre with specialists from the departments of Medicine, Microbiology, Obstetrics & Gynaecology, Paediatrics, Dermatology / Venereology and Chest diseases should meet once in two months to review ART services and interdepartmental linkages. This ART team meeting can be clubbed with other meetings of institution that are held periodically.

ART centre should have referral linkages with atleast following and nurse should be responsible for tracking the referrals within the hospital. The format at **Annexure 10** should be used for this purpose.

- 1) Antenatal clinics and Gynaecology Department
- 2) Microbiology Department (for CD4 count and other investigations)
- 3) Paediatric Department
- 4) Dermatology and Venereology Department
- 5) Chest Diseases / Tuberculosis centre
- 6) Other departments as per requirement

2.10.2 Linkage with Integrated Counselling and Testing Centres (ICTC)

The integrated Counseling and Testing centre (ICTC) is the first interface for the entire range of preventive, care and support services provided under the National AIDS Control Programme. The key functions of an ICTC include not only the early detection of HIV, provision of basic information on modes of transmission and promoting behavioral change, but also linking of clients with appropriate prevention, care and treatment services. The linkages between ICTC and ART centre need to be strengthened so that all newly diagnosed HIV positive clients are registered at an ART centre for treatment as early as possible. In order to ensure this a “triplicate referral from (pink slip) has been developed which will be filled in triplicate at ICTC, of which one copy will be retained at the ICTC, the 2nd copy will be given to the HIV positive client during post test counseling and the 3rd copy will be sent by email (or by post if email is not available) to the ART centre where the HIV positive client is referred to. After the HIV positive client is registered at the ART centre and all basic investigation including CD4 test have been carried out the ART centre, counselor will send the referral form back to the ICTC after filling in necessary details by email (or by post if email is not available). The ICTC counselor will thereafter make a list of drop outs (positive clients who have not registered at the ART centre), and will follow them by phone/ home visits. The approved “referral form” is enclosed at **Annexure 11**. This follow up shall be coordinated by DAPCU/JD (BSD)/GIPA Coordinator at SACS.

All pregnant women found to be HIV positive at ICTC should be immediately referred to the nearest ART centre/ LAC plus centre. The services of PPTCT (IL& FS) outreach worker should be utilized to ensure that referral ultimately results in registration at ART/ LAC Plus. It should be ensured that all positive pregnant women get full ART if their CD4 count is less than 350 or irrespective of CD4 count for WHO stage 3 and 4). The others get PPTCT prophylactic regimen as per PPTCT guidelines. This underscores the need for linking pregnant women who are diagnosed to be HIV positive to the ART centre. This will allow for clinical staging, detection of opportunistic infections, and assessment of CD4 counts. ICTC counselors should give highest priority to this and motivate all HIV positive pregnant women to go to the nearest ART centre in the interest of their own and their babies health. All positive pregnant women registering at ART centre shall undergo a baseline CD4 count. In instances where an

HIV+ve pregnant woman is not able to travel to the ART centre due to health constraints, long distance or any other reason, then arrangements will be made by the concerned ICTC to transport whole blood sample to the ART centre for CD4 count. The transportation of the sample will be undertaken by the lab technician of the concerned ICTC once a month on a designated day, which will be decided after mutual consultations between the ICTC and the ART centre. For this a sample of 5 ml blood need to be sent in an EDTA evacuated tube (purple cap) using a sample collection and transport procedures. It will be the responsibility of the MO in-charge of ICTC to see that the CD4 report is handed over to the HIV positive pregnant women with proper guidance and counseling. This transportation should be done only if there is a serious health constraint or the HIV infected lady is unable to travel due any other reason The ART centres should maintain a list of such patients in a register and track them if required.

All HIV positive clients should be referred to ART centre/ LAC Plus centre using a triplicate referral slip. During counselling at ICTC, the patient must be instructed by the ICTC counsellor to carry an identity and address proof and two photographs along with him/her when going to ART centre. However, registration should not be denied to any client because of the lack of identity proof/ photograph. Instead, he/she should be registered in HIV care and asked to produce it in the next visits.

2.10.3 Referrals outside the Institutions

Certain conditions may need a referral to facility that is outside the institution where ART centre is located. The counsellor/ nurse may be the right person to identify such needs and suggest the place of referrals. The format at **Annexure 10** should be used for this purpose.

Hence, it is important that the counsellor has a list of centres for referrals and is also acquainted with the person to whom referral is to be made. The various possible places for linkages and referral may include the following:

- 1) NGOs actively working in the field of HIV/AIDS including those involved in Targeted Interventions for High Risk Groups (FSW, Migrants, Truckers, IDU, MSM etc.)
- 2) Other Government Hospitals
- 3) Community Care Centres
- 4) Drop -in Centres
- 5) Home Based Care Organisations
- 6) Local PLHIV networks
- 7) Rehabilitation centres

It is important to track and document the result of referrals. Counsellor/community care coordinator would be responsible to keep track of referrals made outside the hospital. ART centre should maintain account of all the referrals made to the facilities outside the hospital. If feasible, PLHIV network or a drop in centre may be given the responsibility to coordinate linkages and referrals.

2.10.4 Community Care Centres

Under NACP, ART centres are linked to Community Care Centres which besides psychosocial support, adherence counselling and tracking of LFU, also admit patients for five to seven days before starting ART. During this period, they provide adherence counselling for patients being initiated on ART. These centres focus on providing four types of services to PLHIV (a) Counselling, in particular for

drug adherence (b) Treatment for minor OIs and TB or link to DOT centres (c) Referral and outreach for follow up of patients on ART (d) Nutritional Counselling; (e) Social support services. CCC also have outreach workers, trained in home based care to follow up with the families and ensure drug adherence. The detailed role and responsibility of Community Care Centre can be referred to in the CCC operational guidelines

ART CCC coordination meetings must be conducted at regular intervals. The DAPCU has to take the lead in this regard. The RCs should also check during their field visits that these meetings are held periodically and minutes are duly recorded and shared. One ORW of the CCC has to visit their linked ART centre on a daily basis.

Standard Operating Procedure (SOP) at ART Centres

This SOP addresses the detailed process of patient flow and patient work up at ART centres as well as serves as guidance to the staff of ART centre. The SOP is essentially divided into 3 parts:

Part 1. Enrollment of patients into HIV care

Part 2. Flow of patient at ART centre

Part 3. Retention of patients in care (Discussed in a separate chapter)

Part 1. Enrollment of patient in HIV care (Pre- ART)

All clients detected HIV positive at ICTC should be referred to the nearest ART centre/ LAC plus centre and registered in “HIV care” (Pre ART), irrespective of their clinical status (symptomatic or not). The post test counselling session at ICTC should place adequate emphasis on need for registration in HIV care and benefits of ART, positive thinking, on the need to involve family and need for regular follow up.

The ICTC counsellor should provide a written guidance to the positive client to carry following documents while going to ART centre, along with address, telephone number of ART centre.

1. ICTC report
2. A valid address proof
3. 2 Passport size photographs

Once the HIV positive person reaches the ART centre, he should be registered in HIV Care (Pre-ART) register and patients demographic and other relevant information recorded in Patient Treatment Record (White Card) and a Green Book be issued to him.

In order to ensure good adherence it is desirable that patient is enrolled at an ART centre near to his current place of stay. He should be asked to furnish a documentary evidence of address proof in the form of voter card/ ration card/ electricity or telephone bill etc. For patients from rural areas, a letter from the Panchayat chief (sarpanch) will suffice as address proof. For patients who are street dwellers, some NGOs have to take the responsibility of following them regularly. The ART medical officer should get full contact details of patient and one care giver, including phone numbers while enrolling in HIV care. However, registration/treatment should not be denied even if the patient does not carry a valid identity proof. Instead, s/he should be registered and asked to bring the address proof during the subsequent visit.

After enrolment, the patient should be counselled again about HIV/AIDS basics, implications of being HIV positive, availability of treatment, positive living, nutrition, positive prevention etc by the counsellor. Testing of spouse/ partner has to be encouraged as early as possible, as well as children if indicated. The patient flow thereafter is described in the flow chart below (Fig 1)

Part 2. Flow of Patient at the ART centre

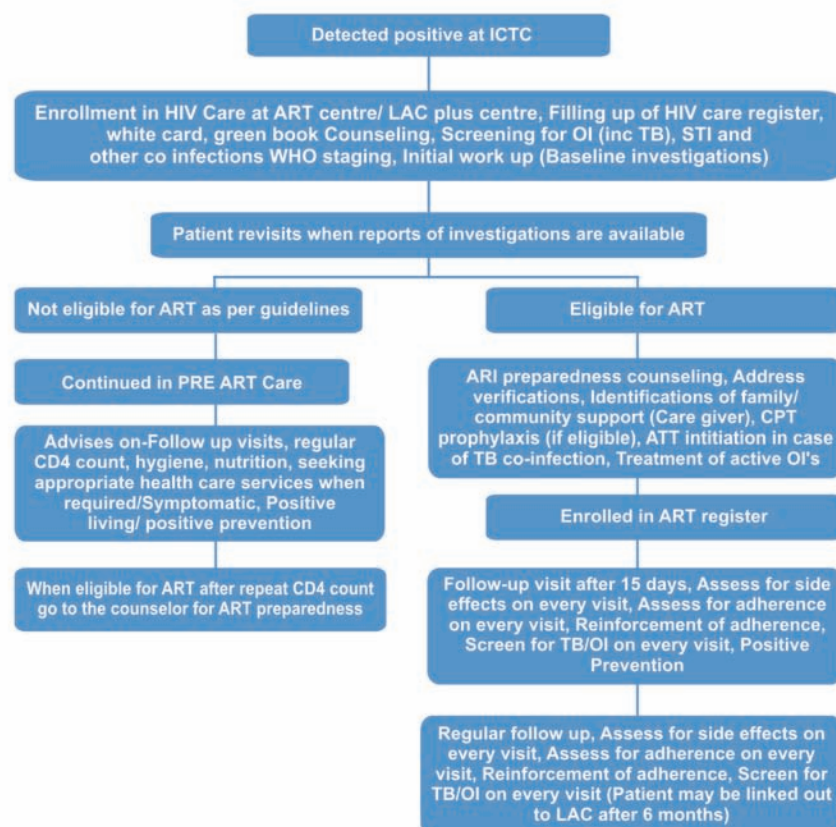
3.1 The First visit

The first point of contact for client at the ART centre is the Care Coordinator at ART Centre. It gives a sense of comfort to recently detected person to see a HIV person working normally as any other staff at the centre without any discrimination.

With confirmed HIV status (ICTC report is a must), the patient is registered in the HIV care (Pre-ART) by the counselor. The counselor makes White Card, issues Green Booklet and fills up the relevant information in HIV Care (Pre ART) Register, White Card and Green Book. The patient is then referred to the doctor who carries out a detailed medical examination during which he should

- 1) Do the WHO clinical staging for patients
- 2) Look for OIs (clinical and laboratory work up)
- 3) Screen for TB (TB symptom score card and relevant investigations)
- 4) Advise laboratory work-up - baseline tests (as per technical guidelines), investigation to rule out OI if any, and baseline CD4 count
- 5) Discuss briefly with patient and his/her care giver (who knows the HIV status) about the management plan for the patients
- 6) Give interim treatment, as required
- 7) Call the patient for review after he gets the results of investigations
- 8) Complete the relevant columns in the White Card

Figure 1: Enrollment in HIV care (first visit- new patients)



3.1.1 Initial work up of patients at the ART centre

The patients should be screened for Opportunistic Infections (OI) and eligibility for ART. WHO clinical staging and CD4 count should be done and documented. Besides this all the patients should also be assessed on the following aspects:

- ◆ Step 1: Clinical History
- ◆ Step 2: Physical Examination
- ◆ Step 3: Baseline laboratory Evaluation
- ◆ Step 4: Preparedness Counselling

Step 1: Clinical History

The clinical history should include information on HIV specific symptoms, both present & past, any past history of TB, HIV related co morbid conditions, history of jaundice, dyslipidemia etc. Besides this detailed sexual history (Genital ulcers, other STIs, multiple sex partners, etc) along with personal history (smoking, alcohol & substance abuse), prior use of ARVs, treatment for coexisting conditions like (diabetes, cardiovascular disease, contraceptives pills, herbal drugs) and family medical history should be taken.

Taking into consideration the nature of the disease detailed, behavioral / psychosocial assessment needs to be done which should include information about educational level, employment status and financial resources, social support and family / household structure and Identification of primary care giver. Besides this a nutritional and mental health assessment (mini mental score) also needs to be done. More details are in "NACO Technical Guidelines on ART".

Step 2: Physical Examination

A detailed physical examination should be done at the first visit which should include measurement and recording of weight and height, vital signs & BMI. Besides this a detailed examination of the oral cavity, lymph nodes, skin, genital ophthalmic and systemic examination need to be carried out.

Step 3: Baseline laboratory work up at ART centre

1. **Essential / mandatory tests for all patients registering in HIV care at ART centre/LAC plus**
 - Haemogram/CBC, Urine for routine and microscopic examination, fasting blood sugar, blood urea, ALT (SGPT), VDRL, CD4 count, X-ray Chest PA view. Pregnancy test if required
 - CD4 Test results should be provided to the PLHIV on the same day as far as possible (with proper counseling)
 - Symptoms and signs directed investigations for ruling out OIs.
- ◆ **Additional tests for all patients to be started on ART**
 - Other investigations like USG abdomen, sputum for AFB, CSF analysis etc. as per the physician's decision depending on clinical presentation. Efforts to be made to fast track these investigations so that ART initiation is not delayed.
 - Serum creatinine is essential when considering TDF.
 - PAP smear, fundus examination also to be done but ART initiation not to be delayed for these tests.

♦ Tests for Special Situation

- HBsAg – for all patients if facility is available but mandatorily for those with history of IDU, multiple blood & blood products transfusion, ALT > 2 times of ULN, on strong clinical suspicion. But ART not to be withheld if HBsAg testing is not available.
- Anti - HCV antibody only for those with history of IDU, multiple blood & blood products transfusion, ALT > 2 times of ULN, on strong clinical suspicion.
- For patients with Hepatitis B or C co-infection, further tests may be required to assess for chronic active hepatitis
- For patients to be switched to a PI based regimen, Blood Sugar, LFT and Lipid profile to be done at baseline.

2. Tests for monitoring purpose

- Essential - CD4, Hb, TLC, DLC, ALT(SGPT), Creatinine/ creatinine clearance (if on TDF), every 6 months or earlier if required. For patients started on AZT based regimen, Hb at 15 days, then every month for initial 3 months, 6 months and then every 6 months/ as & when indicated. For patients started on NVP based regimen, ALT (SGPT) at 15 days, 1 month and then every 6 months. For patients started on EFV based regimen, lipid profile should also be done yearly. For patients started on ATV, LFT to be done at 15 days, 1 month, 3 month, 6 months and then every 6 months. Blood sugar and Lipid profile every 6 months for patients on PI based regimen. All the above tests can be done earlier based on clinicians assessment/discretion.
- Other investigations during follow up as per requirement /availability.

All above investigations other than CD4 and viral load estimations (when required), shall be done from the health facility where the centre is located, with support from State Health Department.

Step 4: ART Preparedness Counseling

ART Preparedness counseling is an important part of initial work up which needs to be done in 2-3 sessions (on an average) while they undergo clinical and laboratory screening. The details are mentioned in the next section.

3.2 The Second Visit

- 1) Patient returns when reports of investigation are available.
- 2) Reports of the baseline investigation (especially CD 4 Count) should be shared with patient by the counsellor with proper counselling and report should not be just handed over to the patient by the laboratory technician
- 3) The counselor builds rapport, re- emphasizes on the counseling done in the last visit, addresses patients concerns etc
- 4) Refers to Doctor, who reviews all the investigations and takes decision about eligibility for starting ART as per guidelines
 - I. If the patient is not presently eligible for ART, patient is continued in pre- ART care, given date for follows up visits for CD4 testing and counseled on positive prevention, nutrition, positive living . Patient is asked to report back to ART centres in case of any symptoms

- II. If eligible for ART, doctor treats active OI, if any, prescribes CPT prophylaxis if eligible, ATT initiation (in case of TB Co-infected) and sends to the counselor for treatment preparedness counseling sessions.
- 5) ART preparedness counseling needs to be done in 2-3 sessions (on an average) while they undergo clinical and laboratory screening. The counselor should make sure that the patient understands that the treatment is life long, has gained knowledge about the nature of treatment, is willing to take ART and follow the adherence guidelines. The patient must also understand that first line treatment is his best chance for long term survival. Hence adherence is most critical issue. He/s should also not share drugs with spouse/ friends or family members. He should also be counseled on probable side effects of drugs and need to use condoms even if both the partners are HIV positive. Counselor should also encourage family involvement/guardianship. Besides this the counselor should also discuss with the patient about risk reduction behavior especially about condom use, substance use and about dietary habits. The importance of accessing an appropriate health facility, as and when required should also be emphasized upon
 - 6) Once the counselor certifies "treatment preparedness", only then patient should be initiated on ART by the medical officer. Normally this should take around 7 days on an average (more if an active OI is present which needs to be treated first)
 - 7) Once ART is initiated, the pre ART register is completed and the ART enrollment register and white card is filled by counselor and the MO (as per the guidelines on M & E tools).
 - 8) MO prescribes ARV and other necessary drugs for 14 days
 - 9) In case of pregnant women, she should be counselled on issues relating to infant feeding, need for regular follow-up, what to do in early post natal period, linking infant to EID after delivery and ART adherence
 - 10) Patient collects drugs from dispensing counter/Pharmacist

3.2.1 Patients not Eligible for ART (HIV care- Pre ART management)

If patient is not eligible for ART as per guidelines, he is continued in HIV ("pre-ART") care. Counselling should be aimed at ensuring risk reduction behaviour of the patient. At the same time, efforts should be made to elicit family and community support for the patient. S/he should also be counselled about:

1. Need for regular CD4 count
2. Follow up visits as and when instructed/ scheduled
3. Positive healthy living
4. Consent form to be signed by the patient
5. Family and social support
6. Risk reduction behaviour, particularly use of condoms
7. Substance abuse and its side- effects
8. Proper dietary intake/ nutritional counselling
9. Accessing appropriate health care services, when required
10. Appropriate psycho- social support
11. Return to work, or if not possible, redirect to other acceptable job profiles and when appropriate, and if necessary, (a) early referral to community support systems, (b) treatment for substance abuse and (c) management of co-morbid psychiatric illness should be carried out.

As many of the patients at this stage are likely to receive ART at some point in the future, repeated counselling should also be targeted at importance of timely initiation of ART as well as ensuring adherence to ARVs, when ART is started. Patients and families should understand that good adherence is integral to successful outcome of ART.

3.2.2 Monitoring of Pre-ART patients

All patients should be periodically screened for eligibility for ART initiation (WHO staging & CD4 Count) and various Opportunistic infections including TB (during every visit) and Sexually Transmitted Infections (STI). It is essential that all patients registered at the centre have 6 monthly CD4 counts done (irrespective of their CD4 counts/ clinical status) or more frequently as per guidelines.

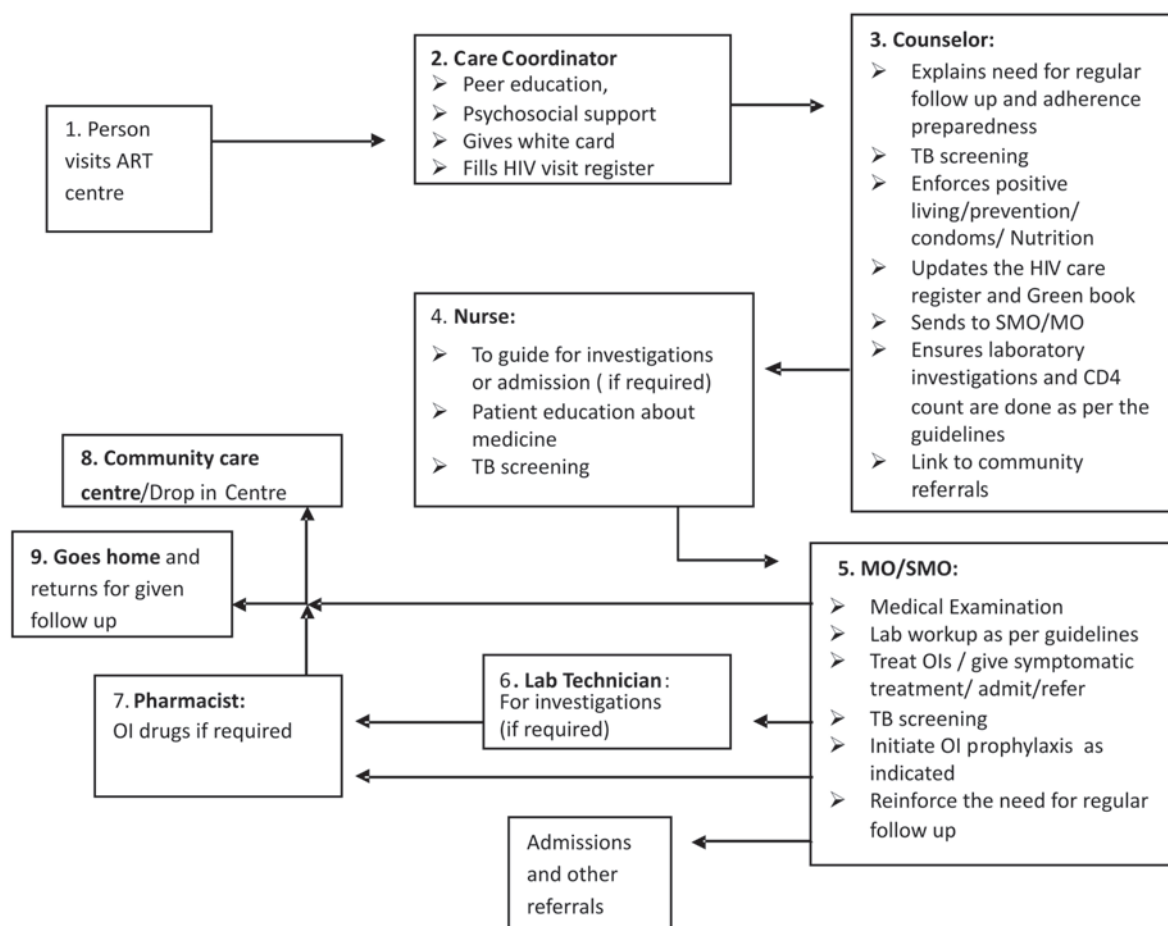
All patients should also be counselled to report back to ART Centres in case of any symptoms prior to their scheduled visits.

3.2.3 Follow up of Pre-ART patients

- I. **CD4 due list:** It is important that a check is kept on the dates of visits of all Pre- ART patients. The staff at the ART centres needs to give dates for next CD4 testing to all the "Pre- ART" and 'On ART' patients as per the guidelines. To ensure that all patients undergo regular CD4 testing, the laboratory technician should prepare a monthly due list of patients who need to have their CD4 tests done. For this the counselor should also explain the last page of the green book to the patient about the schedules dates for their CD4 testing and the next date of visit. If they do not come regularly the patients need to be contacted. Although the patients should also be explained that if required, they should visit the ART centre anytime before their scheduled visit.

Whenever patient becomes eligible for ART, they should be counseled for ART preparedness, prophylaxis for OI started and then enrolled in ART enrolment register for ART initiation.

- II. **Follow up of PLHIV eligible for ART but not started on ART:** A line list of such patient should be prepared and they should be followed/ tracked more rigorously for initiation of ART.
- III. **Follow up of PLHIV with borderline CD4 Count (350-400 cells/mm³):** Such patients should be closely monitored for new symptoms and CD4 count should be repeated at 4 weeks. The patient flow for Pre- ART patients during subsequent visits to ART centre is summarized in Fig 2 on the next page.

Figure 2: Patient Flow in the ART centre – "Pre ART" subsequent visits

3.3 Initiation of ART

Patients who have a confirmed HIV positive report from ICTC and fulfil the criteria for starting ART as recommended by the national programme should be counselled on ART adherence and should be adequately prepared for treatment (at least 2-3 sittings with the counsellor). In addition, the centre has to take the following actions:

- 1) Obtain an Address proof /verification of the patient through ORW of CC and other ORWs
- 2) Identification of family / community Support/ care giver
- 3) Consent form to be signed by the patient for ART (Annexure 12)
- 4) CPT prophylaxis
- 5) ATT initiation (in case of TB Co-infected)
- 6) Treatment of Active OI, if any

Adherence counselling should be repeated and family (or guardian) support established. Once the ART preparedness is established (to be certified by Counsellor) and active OI excluded, the patient should be registered in the ART Enrolment Register and started on ART. The patient should be admitted in CCC for initial 5-7 days during investigation period for preparedness counselling (if necessary). Preference be given to out station patients and willing patients.

3.3.1 Visit after ART is started (After 2 weeks of ART initiation)

The patient is usually called 14 days after initiation of ART. During the first fourteen days of ART, a close watch needs to be kept on patient, to look for side effects of ARV's especially Nevirapine or Efavirenz. Individual counselling to address adherence issues and risk reduction behaviour and counselling to help the patient lead a positive and healthy lifestyle should be repeated during each visit of the patient, especially during the early days of ART.

Those suffering from any drug reactions, IRIS, OIs and disease manifestations should be attended to immediately by the medical personnel at the ART centre. If required they should be admitted and treated in the institution.

Those patients who are symptom free and have maintained adequate adherence levels should undergo a routine counselling session including adherence counselling and be examined by the medical officers of the ART centre. Routinely, all patients should be examined for TB, IRIS, new OIs and drug related side effects. A pill count should be done to check adherence. The flow of patient is shown below in Fig No: 3.

Patient goes to counselor.

Counselor assesses

- ◆ Adherence to treatment
- ◆ Barriers in adherence, if any
- ◆ Any side effects of ARV drugs,
- ◆ Psychological support, spouse testing, if not done
- ◆ Consider taking written consent for home visits
- ◆ Refers to SMO/MO

The SMO/MO

- ◆ Examines the patient
- ◆ Establish the status of previous OIs and symptoms
- ◆ Looks for side effects of ART, especially NVP & EFV
- ◆ Explains the possibility of IRIS
- ◆ Makes any referral for patient, if needed
- ◆ Counsels the patients on signs and symptoms of ARV side effects of the drug regime used
- ◆ Laboratory investigations if indicated e.g. haemoglobin, SGPT etc
- ◆ Follow-up appointment given after 1 month.

During the visit, respective columns in the ART Register and ART treatment record (White Card) are filled by the counselor and the Medical Officer as per guidelines in M&E tools

3.4 Subsequent Follow-ups Visits (Once a month)

Responsibilities of various personnel during monthly follow-up visits are as under:

Counselor

- ◆ Monitor adherence and ask for any potential or identified barriers
- ◆ Note if any referral is required and inform the person in-charge for referral (SMO/MO or nurse)
- ◆ Link the patient to community based organization and rehabilitation centres, if available and desired. Should at least inform the patient about the existence of various support groups.
- ◆ Counseling of guardian/ care giver
- ◆ Complete the columns in the Patient treatment record (white card) ART register and Green book
- ◆ Assess drug adherence by doing pill count.
- ◆ Confirm the address of the patient
- ◆ Counsel patient about return to work, or if not possible, redirect to other acceptable job profiles and when appropriate, and if necessary, (a) early referral to community support systems, (b) treatment for substance abuse and (c) management of co-morbid psychiatric illness should be carried out.
- ◆ Send to the nurse, if available or to the MO, if nurse is not available

Staff Nurse

- ◆ Take vital parameters
- ◆ See for oral thrush, IRIS
- ◆ Ask for symptoms of any side effects of drugs or any fresh OI
- ◆ Screening for TB & completion of TB register
- ◆ Stress the importance of adherence
- ◆ Make the entries in the relevant columns in the Patient treatment record (white card) and Green book
- ◆ Send the patient to MO

Doctor (SMO/MO)

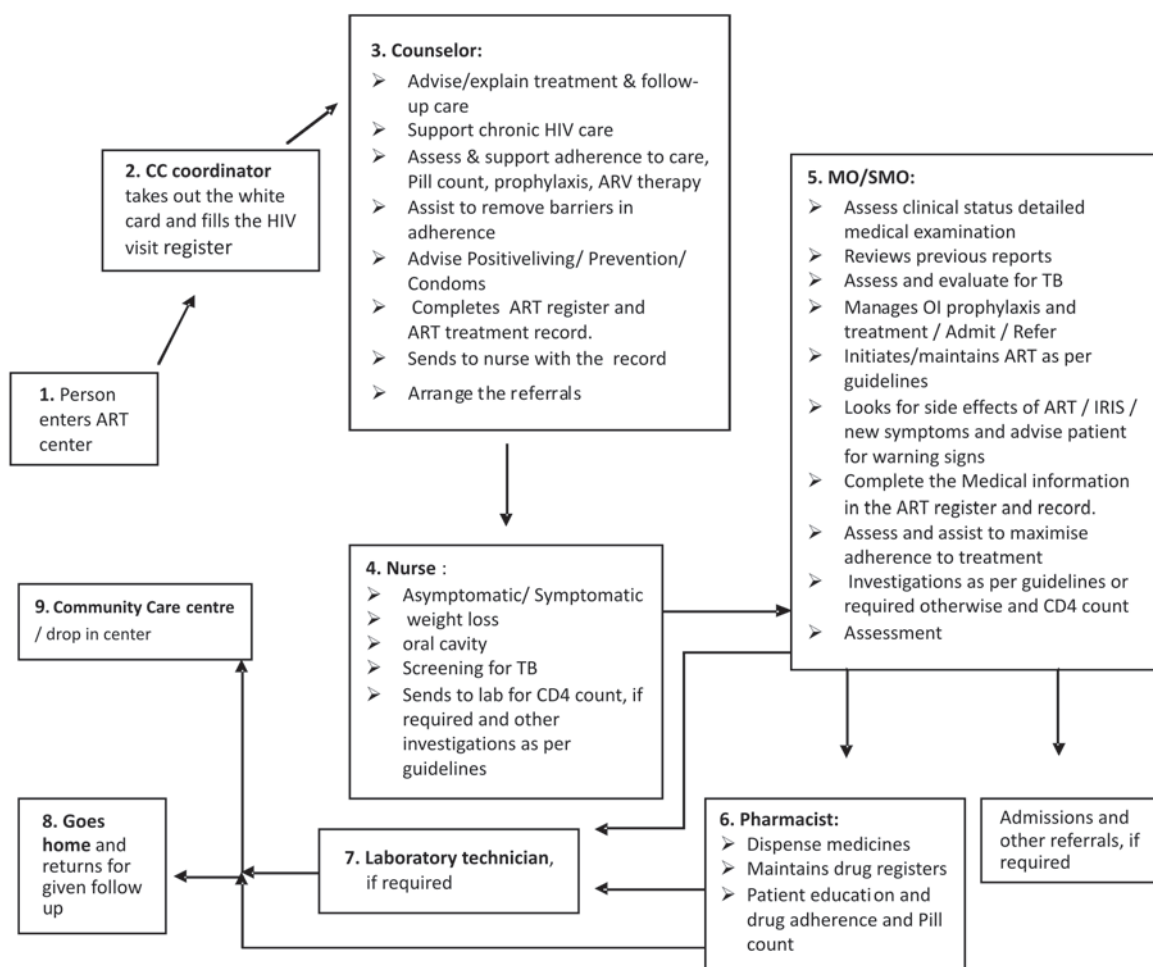
- ◆ Assess adherence
- ◆ Assess for side effects
- ◆ Assess for OIs and IRIS
- ◆ Assess for treatment failure or drug toxicity
- ◆ Send the patient for investigations as per guidelines or otherwise indicated
- ◆ Make any required referrals
- ◆ Gives follow up date for monthly visit.
- ◆ Make the entries in the relevant columns in the Patient treatment record (white card) and Green book

3.4.1 Further follow up visits

During follow up visits, repeat CD4 counts and other laboratory investigations should be done as per guidelines or as required.

It is important to realize that HIV infection often affects the family rather than only an individual. Hence, the ART team should try and determine the status of those not on care and treatment (like parents of a child under treatment, spouse of HIV infected person). The counselor, nurse and doctor should try and identify the family members for their HIV status and get them into care. Efforts should be made to harmonise the day of visit of spouse/children on same day by adjusting the follow up dates. A special day should be fixed for children when a faculty member is available for CLHIV care.

Figure 3: Patient Flow at ART centre for patients already on ART



3.4.2 Monitoring of patients "On ART"

As per the ART technical guidelines, patient should undergo six monthly CD4 count testing, weight check, ambulatory status, screening for OIs and routine laboratory investigations, including Hb. Patient should be screened for TB during every visit. It is important that the patients on ART are monitored to ensure that they are regular in their follow up visits to the ART centre. "On ART" patients should be given date for next visit for collection of ARV drugs and ensure that the patients do come on their "due date".

It is important that a check is kept on the dates of visits of all "On ART" patients at the ART centre. If the patients do not come regularly, they need to be contacted.

Mechanism for giving "due date" to "On-ART" patients: When the patient is initiated on ART for the first time, s/he is given drugs for 14 days. In the next visit, he should be given drugs for 30 days but should be called on the 28th day. If his adherence has been 100%, he should be left with the drugs for 2 days. Henceforth, he should always be given drugs for 30 days and his next day of visit should always be on the 30th day. In this manner, ideally he should always be left with drugs for 2 days at any given time.

Regular CD4 testing: As mentioned above CD4 count is essential for monitoring the patients on ART, therefore it is mandatory that all patients on ART have 6 monthly CD4 counts done, irrespective of their CD4 counts/clinical status. To ensure that all patients undergo regular CD4 testing, the laboratory technician should prepare a monthly "due list" of patients who need to have their CD4 tests done. These patients who do not undergo CD4 count on due date, their white cards should be kept separately so that the MO is alerted for CD4 count on the next mentioned visit of the patient.

Frequency of drug dispensing: Normally, patients are given drugs for one month on every visit. The drugs can be given for two months if patient fulfills the following criteria:

- 1) Stable on ART for a minimum of one year
- 2) Has undergone at least 3 CD4 counts done (including 1 baseline & 2 six monthly follow up) and has shown improvement in CD4 count
- 3) No history of major OI for the last 6 months
- 4) Has adherence level of more than 95% on all visits in the last 6 months and has kept their pharmacy appointments ('on time drug pick up')

"MIS" & "LFU" Cases: The patients who are irregular in their visits to the ART centre are categorized as "MIS" patients and/or "Lost to Follow up" patients depending on the duration for which they have been irregular with their visits to the centre.

Measures to be taken to prevent patients from being lost to follow up: This is possible if the patients are tracked at "MIS" stage. Hence, it is essential that a "daily due list" is prepared at all centres. This list can be prepared in two ways:

- a) Ideally this list should be auto generated through PLHIV software as per appointments given to the patients. This is possible if all the white cards are completed and computerized on a daily basis
 - b) This list can also be generated through the Drug Dispensing Register. As we call ART patients on the 30th day, accordingly a list can be prepared from the drug dispensing register that when is the next visit due.
1. All the patients who were supposed to come to the ART centre on a particular day as per the "daily due list" but have not come, need to be listed at the end of the day. If they do not turn up in the next 48 hours, they need to be contacted up through telephone. In case their contact details are unavailable (telephone number), the names of such patients may be given to the CCC out outreach workers from NGOs in NACP or Health Systems - NRHM (ANM, ASHA Workers through PHC Health Supervisors)/TI partners and their outreach workers in the field. DPM/ District Nodal Officer for HIV are supposed to share this list with the ICTC supervisor/Link Workers/DLN/Other outreach workers in NACP or health systems/TI partners for field visits. DPM/ District Nodal Officer for

HIV will then get back to the respective ART centres on field visit outcome on monthly basis during monthly meeting of ICTC counselors. SACS officer in-charge of CST activities (AD/DD/JD/Consultant/GIPA Coordinator) will help to coordinate for inter-district/interstate MIS patient.

2. Mechanism for tracking Lost to follow up cases: After a list of LFU patients is prepared, a “tracker form” is to be filled by ART centres and given for LFU tracking. The mechanism for tracking of LFU cases is the same as that of the tracking of MIS cases.
3. A team should be formed for retrieval of MIS and LFU cases. This team should comprise of Nodal officer, ART M.O, CCC incharge, DLN members, ICTC, STD, TI outreach workers, in that area with PHC and CHC Staff (ANM, ASHA and Health Supervisors). The PLHIV should be told in during the initial counselling that in case of MIS/LFU his address, phone number and contact details will be given to these health personnel and a written consent be taken at the time of enrolment in HIV Care a per consent form at **Annexure 12**. The section on “retention in care” deals with this issue in more detail.

3.5 Confidentiality and Discrimination Issues

Irrespective of HIV status of a person, all patients are entitled to receive general and specialty out-patient and in-patient services in a hospital. Confidentiality should be maintained at all levels irrespective of HIV status as per accepted medical ethics and the law. Maintenance of confidentiality should help to reduce discrimination against PLHIV during the management of the patient in the hospital. It may also be noted that hospital infection control policies and measures, are properly maintained at all levels and Post Exposure Prophylaxis (PEP) is available for all the staff members. If norms are followed, it will create a safe environment for health care providers to manage PLHIV appropriately.

3.6 Supports from NGOs and Positive Network Groups

In order to improve the quality of care provided to HIV/AIDS patients, the hospital should have effective linkages with Community Based Organisations (CBO), Faith Based Organisations (FBO) and with Positive Network Groups in the region. Rapport building and development of positive relationships with these organisations will also help reduce the burden on the hospital. Such NGOs may provide vocational (or occupational) rehabilitation to deserving PLHIV and family members and support children affected by AIDS by providing educational support and care homes. They could also provide legal support when PLHIV or their family members are deprived of their rights. In addition, they are often well equipped to provide psychosocial support and even nutritional support to the patients and if necessary, their families.

Monitoring and Mentoring of ART Centres

Monitoring and evaluation is a mechanism to measure whether identified and agreed-upon programme goals and objectives are being achieved. Monitoring is the routine tracking and reporting of priority programme information and the intended outputs and outcomes. Evaluation is a rigorous and scientific study of the activities, characteristics and outcomes that determine the merit or worth of a specific programme. Both monitoring and evaluation include a component of analysis and necessary intervention.

Continuous supervision of activities carried out at ART centres is essential for monitoring effectiveness and quality of services provided under the programme. To facilitate a uniform and systematic monitoring, systems and tools have been developed.

4.1 Monitoring Tools

Standardised reporting and recording tools used for data collection and supervision have been classified under the following categories:

1. Care and Treatment Records

1. Patient Visit Register
2. HIV Care (Pre ART) Register
3. Patient Treatment Card (White Card)
4. Patient Booklet (green booklet)
5. ART Enrollment Register
6. Second line and Alternative first line ART reporting tools (For CoE and ART plus centres)
7. Daily/ Monthly OI reporting format (**Annexure 13**)
8. Death register (**Annexure 14**)
9. CD4 Lab Register
10. TB-HIV Tools
11. LAC tools
12. ART Centre HIV Exposed Infant/Child Register
13. PEP Register
14. Format for Patient Tracing/Tracking

2. Stock Management Registers (Drugs, CD4 Kits & Consumables etc.)

1. Antiretroviral Drug Stock Register
2. Antiretroviral Drug Dispensing Register (Adult)
3. Antiretroviral Drug Dispensing Register (Pediatric)
4. OI drug stock Register (Common for Adult and Pediatric Patients)OI drug dispensing Register (Common for Adult and Pediatric Patients)
6. Expired Drug Disposal Register
7. CD4 Kit & Consumable Stock Register
8. Fixed Assets Register

3. Referral Formats

1. ICTC to ART Triplicate Referral Form
2. TB-HIV (ART) Duplicate Referral Form
3. Exposed infant/Child Referral Form
4. Transfers Out Form (**Annexure 15**)
5. SACEP Referral Form (**Annexure 16**)
6. RNTCP Lab Referral Form
7. LAC/LAC Plus link out form (**Annexure 17**)
8. LAC/LAC Plus link in form

4. Monitoring & Evaluation Formats

1. ART Centre Feasibility Format
2. ART Centre Preparedness Format
3. ART Centre Supervisory Visit Format (**Annexure 18**)
4. LAC Feasibility Visit Format
5. LAC Supervisory Visit Format
6. Private Sector Reporting Format (Quarterly)
7. Standard Tour Report Format
8. CST Monthly Report Format
9. Format for Assessment of CCC

5. Programme Performance Monitoring Reports

1. Monthly ART Centre Report (Including CD4)
2. Monthly LAC/LAC Plus Report
3. TB-HIV monthly report from ART centre
4. Private sector reporting format (Quarterly) (**Annexure 19**)
5. EID Monthly Report from ART Centres
6. State fact sheet from SACS

The tools at section 1 to 3 are to be used by the ART Centre staff. The tools at section 4 are to be used by SACS/NACO officials during their visits. They will also scrutinize all other formats in section I to III for their completeness & accuracy. They will also guide the ART Centre staff on deficiencies in the same. The details of these formats are available in M& E modules.

4.2 Reporting Mechanism and Flow of Information

Information from the prescribed records and registers is compiled and used in filling up various monitoring reports which are forwarded to SACS and NACO. **Monthly ART reports from centres should be forwarded by 4th of every month to CIMS by email with a copy to artreports@gmail.com, artdrugs@gmail.com, concerned SACS, JD (CST) RC, CoE & pCoE.**

The responsibility of information collection, reporting, management and analysis rests at four levels:

1. **ART Centres** for creation and maintenance of patient records and files, operational information and reporting to SACS/ NACO through monthly reports and special studies
2. **State AIDS Control Societies (SACS)** for analysis and consolidation of ART centre information, quality control, assessments, supportive supervision and guidance, feedback and dissemination of information to state-level stakeholders; for Programme Implementation Plans (PIPs) and Annual Action Plans when reporting to NACO
3. **NACO** for compilation of reports, analysis, evaluation and dissemination of information back to SACS/DAPCU for PIP, planning, procurement and expansion; to national and international stakeholders for advocacy
4. **Centres of Excellence/Network of Institution** for HIV/AIDS Research (NIHAR) (after due approval from NACO) for conducting special studies (evaluations) and operational research to assess the overall vision and direction of the programme.

4.2.1 Recording information

Information is recorded and filled in the prescribed sections of tools by different staff member of ART centre as indicated in the M&E module.

4.3 Responsibility of the CST Division at SACS

The Joint Director (CST) is the focal person for ART services in the state. If the post of JD (CST) is not sanctioned or vacant, the Project Director should identify a senior officer, preferably, Addl. Project Director as a nodal officer for the effective supervision and monitoring of the implementation of ARV treatment programme in the State. Project Directors of SACS should take all steps to sensitize the Principals, Deans and Medical Superintendents of the medical institutions in their states on CST related issues and support referral from the hospital for other services. The SACS will oversee the coordination of ART services at the implementation level through a team approach and coordination with NGOs.

4.3.1 Job Responsibilities of JD (CST)

- 1) All administrative and file work pertaining to CST services in the state including facilitating the staff appointment, salary, appraisals, officer orders to ART centres etc
- 2) To compile the monthly ART centre reports from all the centres and send to NACO by the 1st week of every month as per the format enclosed

- 3) To compile the monthly drug summary sheets from all the ART centres and send to NACO by the 1st week of every month as per the format enclosed
- 4) Supervision and monitoring of ART implementation in the State (should visit each ART centre at least once in 3 months).
- 5) Coordination with Principals/Deans of Medical Colleges and Medical Superintendents/Director of District Hospitals/Other Hospitals
- 6) Coordination with the Regional Coordinator (CST) in the planning and implementation of ART services
- 7) Identification of sites for new ART centres as per NACO criteria
- 8) Identification of ART teams and organise their sensitisation on ART Services
- 9) Coordination of ART services with active participation of NGOs and PLHIV networks
- 10) Collate, compile and forward data to NACO in prescribed format
- 11) To submit the monthly CST report to NACO
- 12) Organise training of various personnel involved in ART services
- 13) Focal point for supply and utilization of ARV drugs, relocations and monitoring of stocks of ARV drugs and coordination with NACO to avoid any drug stock outs
- 14) Monitor procurement, supply and availability of OI and PEP drugs
- 15) Strengthening of linkages between ART centres and ICTCs
- 16) Establishment and monitoring of Link ART Centres following NACO criteria and guidelines
- 17) Coordinate within SACS with the Basic Services Division to ensure maximal linkages with ICTC, PPTCT (including EID) and HIV-TB.

4.3.2 Job Responsibilities of Regional Coordinator

NACO has also appointed Regional Coordinators for CST services. Basically RC's are directly contracted by NACO their main job responsibility is mentoring and monitoring of ART facilities through extensive travel. They must submit their tour report to NACO with copy to SACS with in 7 days. Sites and regular feedback on deficiencies to NACO & SACS. They are not replacement for JD (CST) or other CST staff of SACS. The RC's work under the direct supervision of ADG (CST)/ NPO (ART), NACO and the Project Director at SACS. They get their work plan approved by NACO on monthly basis and submit report on their activities to NACO with copy to SACS. (The role of RC's is different from JD (CST) in terms of mentoring and monitoring of centres while the JD's role is more administrative) and RC shall not do the routine file work at SACS.

The job responsibilities of Regional Coordinators are as below:

- 1) To ensure implementation of CST Services as per prescribed Operational Guidelines for CoE, pCoE, ART plus, ART centres, LAC plus, LAC and CCC
- 2) To ensure adherence to the highest standards of quality excellence in patient care and follow good clinical practices and ensure PLHIV are not discriminated in the hospital and are not denied admission/ care
- 3) To assess and take measures to strengthen linkages of the ART centres with the ICTC, PPTCT, EID and TB programme as well as with the Community Care Centres. This shall be done in places with existing ART centres as well as for those planned later on

- 4) To coordinate with Principals/Deans of Medical Colleges and Medical Superintendents/Director of District Hospitals/Other Hospitals for coordination of ART services with other departments in the institution
- 5) To support SACS in developing clear targets, with time lines, determine resource requirements and assist in establishing the program management and information systems for scaling up ART as part of the comprehensive HIV/AIDS Care and treatment programme
- 6) To undertake regular visits to service delivery points (share sites visited with JD/ Consultant (CST) to avoid duplication) for assessment of:
 - I. Facilities providing ART and HIV/AIDS care,
 - II. Laboratories for CD4 testing including supply of CD4 kits.
 - III. Human and financial resources and
 - IV. Infrastructure at Centres
- 7) Feasibility visits for new ART centres
- 8) To give feedback to JD (CST) on stocks of ARV drugs from analysis of drug stocks from monthly reports of ART centres
- 9) To assist JD (CST) in conducting regular review meetings of ART centre and State Grievances Redressal Committee (SGRC) meetings
- 10) To coordinate training activities of different categories of health care providers for the ART centres with the concerned CoE
- 11) To assist SACS in training, supervision and establishment of follow-up systems for patients on care and ART in the public and private sector
- 12) To communicate up-to-date information on programme implementation and feedback on policy implementation to NACO and ensure that all centres send monthly ART report to NACO by 4th of every month
- 13) To provide a regular update to NACO on the ART program in the region and assist the SACS and NACO in analysis of data and publications
- 14) To send monthly reports of CST on work done in the region to NACO and attend periodic review meetings at NACO
- 15) To review functioning of CCC on regular basis to ensure that operational guidelines are followed.

4.3.3 Role of Centres of Excellence/ Pediatric Centres of Excellence

Mentoring can be defined as “a sustained, collaborative relationship in which a highly experienced health care provider guides improvement in the quality of care delivered by other providers and the health care systems in which they work.”

The CoE shall guide the ART centres linked to them on five issues: a) Relationship building; b) Identifying areas for improvement; c) Responsive coaching and modeling best practices; d) Advocating for environments conducive to good patient care and provider development; e) Data collection and reporting.

CoE shall monitor and mentor the ART centres linked to them on both programmatic and clinical aspects. The CoE should be able to plan, organize and carry out all mentoring activities. A core group of mentors of CoE will be identified and trained as mentors by I-Tech. This team of mentors will comprise of Programme Director, Deputy Programme Director, faculty, ART SMO/MO, Research Fellow - Clinical, Data Analyst. Mentoring will be for ART Plus centres, ART centres, LAC, LAC plus, CCC linked to the CoE and also for the trainees from the same institute and other facilities.

The expanded role of the CoE and the Clinical Expert Panel will include supporting and strengthening the monitoring and evaluation of program activities. Performance of the attached ART centres and other facilities will be monitored by CoE's and supportive measures taken to strengthen the program. ART program indicators will be used to determine and monitor the ART centre performance.

Programmatic mentoring / supportive supervision will be done by a team which would include staff from the institution, CoE, NACO, SACS. Mentors will make onsite visits to the ART centres and provide supportive supervision and programmatic support. The mentoring will be done through email and telephone also.

Mentors will also take the responsibility of updating / reiterating the revisions in the guidelines to the facility level staff during their visits.

Planning of mentoring visits should be made in consultation with officials of NACO, SACS and the CoE to ensure supportive supervision provided during routine program monitoring visits by RCs and SACS officials is not duplicated. Mentoring visits should be viewed as an opportunity to provide technical assistance and guidance. Mentors and mentees identified should be individualized to the institution and based on the needs on the institution / CoE. Frequency, timing and duration of mentoring visits will be defined by the CoE. However, a minimum number of onsite visits need to be determined but may be modified according to the needs identified.

The Programme Director CoE/ pCoE should also serve as a regional mentor which would add to the quality of mentoring provided within the program. More details on mentoring are in the CoE Scheme.

4.4 Documents, Guidelines and Monitoring Tools

SACS should ensure that each ART centre has following documents and items:

- 1) ART Technical Guidelines
- 2) ART Operational Guidelines
- 3) Paediatric ART guidelines
- 4) Second Line ART guidelines
- 5) LAC/LAC plus Guidelines
- 6) CCC Guidelines
- 7) National Guidelines on Counselling; Handbook for Counsellors
- 8) National Guidelines on OIs, CD4 testing (including linkages), HIV testing
- 9) PPTCT Guidelines
- 10) EID Guidelines
- 11) HIV-TB module for ART staff
- 12) List of ART centres in India
- 13) Adequate stock of Registers, Treatment Cards, Reporting Formats and Referral Forms. This is to be printed by the SACS using funds available under the IEC component and supplied to the ART centres.

4.5 ART centre review meetings

All states should ensure that regular review meetings of ART centres within the state are held every quarter. The JD CST / Official In charge of CST at SACS shall ensure proper organisation of meeting, documentation and follow up action on the issues raised during the meeting. The concerned CoE should also be involved in the meeting and meeting should be held at CoE as far as possible. This meeting should be done as per the following guidelines:

- 1) The Nodal officer and one SMO/MO must attend and the Nodal officer should deliver the presentation
- 2) All centres should make presentations should be done as per the template provided
- 3) Cross-check the validity of data well-before the presentation and approval from your nodal officer on the contents. Focus only on operational and functional issues
- 4) The Nodal officer and one SMO/MO must attend and the Nodal officer should deliver the presentation
- 5) During the review, the centres should bring pre-ART and ART enrollment register (not the current one) and white cards of five pre-ART and on ART patients each (both more than one year old) as per "Pre ART" and "On ART" No. allotted randomly by RC on Phone. They should also bring "daily due" list/CD4 due list/last month's tracker format given to CCC/DLN
- 6) Regional Coordinators to get the slides from all centres well in advance and guide the centres on proper compilation of data and presentation.

Retention into HIV Care

India has scaled up its ART programme very rapidly a step towards universal access to HIV treatment. Of the various factors that are necessary for optimal treatment outcomes, important ones include timely initiation of ART, high levels of adherence to the treatment and long term retention of patients in the programme. Retention in HIV care ensures delivery of a variety of services like prevention, treatment, support and care services on a regular basis. It is important that adequate measures are taken at every stage to ensure maximum retention. The various stages at which retention into the HIV programme can be compromised vary from the time between the referral of patients after confirmation of HIV status at ICTC to enrollment at the ART centre for HIV care, between date of enrollment at the ART centre for HIV care to date of eligibility for initiation of ART, between date of eligibility for initiation of ART to actual initiation of ART and any time during the course of ART treatment.

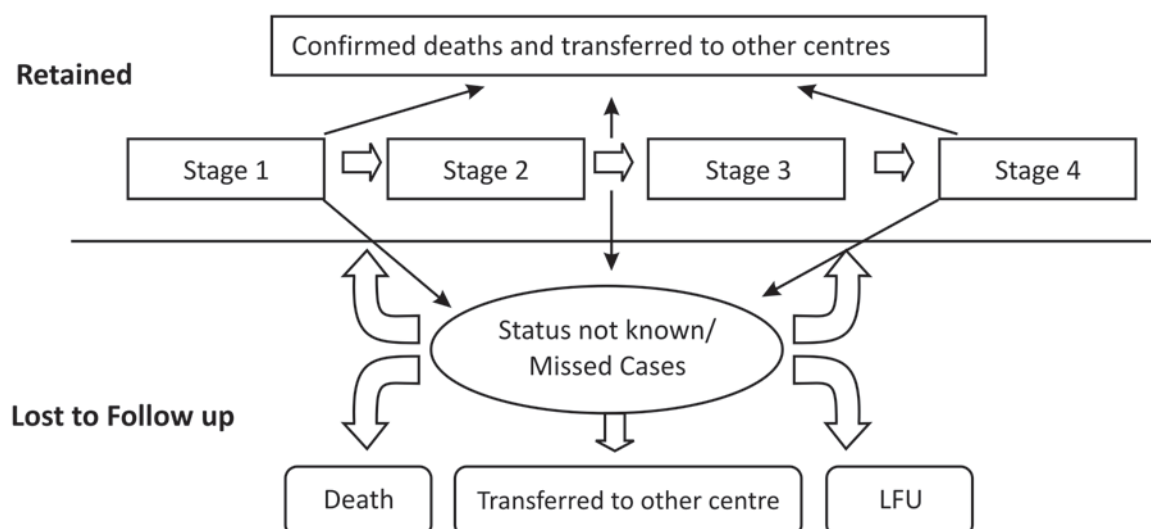
5.1 The four basic stages during which PLHIV can be lost to follow up are:

Stage 1 LFU: From testing at ICTC to enrolment into HIV care at the ART centre

Stage 2 LFU: From enrolment in HIV care to ART eligibility

Stage 3 LFU: From eligibility for ART initiation to actual initiation of ART

Stage 4 LFU: Any time during the course of the treatment



Active measure need to be taken at every stage to ensure maximum levels of retention of the PLHIV in the programme.

- ♦ **Stage 1 LFU:** After confirmation of HIV diagnosis at the ICTCs efforts should be put in to ensure that the patient enrolls at an ART centre/ LAC plus convenient to him/her. For this purpose a “triplicate referral slip” (pink slip) should be used to refer the patient to a specific ART centre/ LAC plus after consultation with the patient. Besides this the patient should be adequately counseled about the importance of getting registered with the ART centre. The patient should also be guided to take address proof and passport size photo with them while going to ART centre. The ART centre staff has to ensure that they send detailed feedback of patients who were referred to them from different ICTC and have actually reached. This will help the ICTC staff to track patients who are LFU at stage 1.
- ♦ **Stage 2 LFU:** During the Pre- ART period the number of patients lost to follow up is quite high. It is important to ensure that PLHIV not on ART, understand the need for regular follow up during the Pre- ART phase also. Proper counseling and CD4 due list are the two important measures that can ensure that patients are regular in their follow up visits and also help monitor patients who are not coming regularly. It is also important to ensure that patients who have borderline CD4 count are monitored more closely and frequently. The patients registered for Pre- ART care should ideally be reviewed once in six months (CD4 count and all basic blood investigations) but if required early until the patient is not eligible for ART initiation.
- ♦ **Stage 3 LFU:** ART is not always started soon after the patient becomes eligible for initiation of ART. The reasons vary from delay in timely CD4 count or clinical assessment (due to LFU) to lack of preparedness of the patient for initiation of ART, delay in laboratory investigations, co- existing TB infection etc. ART initiation preparedness counseling is an important component of Pre-ART counseling and it should be ensured that all aspects of the ART treatment are discussed and explained to the patient. Efforts should be made to ensure that all the relevant investigation results are back within 3 days in order to avoid any delay in the initiation of treatment.

In order to ensure that there is minimal LFU of patients eligible for ART, a line list should be maintained of patients who are “eligible for ART but not yet initiated” and those children who have been found reactive by WBS at ART centres but have not initiated ART.

- ♦ **Stage 4 LFU:** Once patients are initiated on treatment it should be ensured that they take their medicines regularly. The pharmacist should make a “daily due list” of all the patients who are scheduled to collect their medicines on a particular day. This list can be made through the drug dispensing register where patients are also given a date for their next visit. The patients who are irregular in their visits to the ART centre are categorized as “MIS” patients and “Lost to Follow up” patients depending on the duration since they have been irregular with their visits to the centre

5.2 Monitoring of patients in "Pre- ART" care

A patient registered under "Pre ART" care is supposed to come to ART centre, at least once in six months for follow up and CD4 test. If he does not come on the scheduled date, he should be listed as "Pre- ART" patient with “CD4 due”. Measures to track these patients should be initiated immediately and line lists of such patients should be shared with the ORW’s of CCC, ICTC, DAPCU during the meetings. If he does not come for the next 6 months from his schedule date of visit, he should be termed as "Pre ART" LFU (i.e. if the last CD4 count is more than 12 months old for a "Pre ART" patient, the patient should be

termed as "Pre ART" LFU). If he/ she visits anytime thereafter, then no new Pre- ART/ registration number is to be given, he/ she should be added in the re- entered section and the LFU figure should be reduced accordingly. (eg: If a patient under "Pre- ART" care came to the ART centre on 6th January 2010, his next scheduled visit should be on 6th July 2010. If he does not show up, the tracking measure should be initiated same month. If he is not tracked in the next 6 months he should be termed as "Pre ART" LFU from February 2011 (after not coming for next 6 months from his scheduled appointment).

5.3 Monitoring patients on ART

A patient "On- ART" will be termed as "MIS" if the patient does not turn up anytime during the month the appointment was scheduled. The patient can be labeled as "MIS" consecutively for three months. After that if the patient does not come to the centre even during the fourth month, then at end of fourth month, the patient will be termed as "LFU". (eg: If a patient on ART collected his ARV drugs on 6th January 2010, his next scheduled visit should be on 6th February 2010. If he does not show up, the tracking measure should be initiated after 2 days. If he does not come anytime during the entire month of February then he should be termed as "MIS" (eg if he comes on 22nd February he will not be termed as "MIS"). Measures to track him should be continued. If he does not come on his next two appointments also (i.e. 6th March and 6th April, he should be termed as "MIS" for these two months also. Now in May if he does not come anytime during the entire month, he will be termed as LFU at end of May. But if he comes anytime during May he will again be termed as "On- treatment").

Remember: A patient will be termed as "MIS" or "LFU" only if he/she does not turn up anytime during the entire month during which the appointment was scheduled. Missing an appointment but coming during that month will not lead to a patient being termed as "MIS" or "LFU".

Mechanism to reduce "On ART LFU"

- 1) All the patients who were supposed to come to the ART centre on a particular day as per the "daily due list" but have not come, need to be listed at the end of the day
- 2) If they do not turn up in the next 48 hours, they need to be called up through telephone
- 3) Line list to track "On- ART" patients who have missed their appointments should be prepared on a weekly basis and shared with the ORWs. All those patients who were scheduled to collect ARV drugs in that particular week but did not show up, should be entered in that weeks line list which should then be shared with ORW's from CCC, DLN etc
- 4) If the patients are beyond the catchment area of the CCC, this list is to be given to the DPM (where DAPCU exists)/ District Nodal Officer for HIV who are supposed to share this list with the ICTC supervisor/Link Workers/ DLN/Other outreach workers in NACP or health systems/ TI partners for field visits
- 5) DPM/ District Nodal Officer for HIV will then get back to the respective ART centres on outcome of field visits monthly basis during monthly meeting of ICTC counselors. SACS officer in- charge of CST activities (AD/DD/JD/Consultant/GIPA Coordinator) and RC's will help to coordinate for inter-district/interstate MIS/LFU patient
- 6) All the "On- ART" patients who do not turn up to collect their medicines within 48 hours of due date or have been MIS/LFU should be entered into the "tracker format. The mechanism for tracking of LFU cases is the same as that of the tracking of "MISS" cases.

Note: Three months is a long period and patients can develop resistance. Tracking of the PLHIV should be initiated at the earliest from the 3rd day with all the mechanisms available in the vicinity of the ART Centre.

HIV-TB Collaborative Activities at ART Centres

The following activities are to be undertaken to effectively carry out the HIV-TB activities at the ART centres:

6.1 Involvement of CST Nodal Officer/Regional Co-ordinator in HIV/TB activities at SACS/District level

The nodal person for all HIV-TB activities at SACS will be the JD/DD/In-charge (Basic Services). However, for smooth functioning of these activities at the ART centres, the JD (CST)/Consultant (CST)/nodal person for CST in the state and Regional Coordinator (CST), NACO should also be involved in the planning, implementation and monitoring for HIV-TB collaborative activities. To facilitate the same the JD(CST)/Consultant (CST)/ nodal person for CST in the state and the Regional Coordinator should be incorporated as a member of the State HIV TB Working Group and State Coordination Committee on HIV-TB. The ART Medical Officer should also be a part of the District Coordination Committee on HIV/TB.

6.2 Reporting for HIV-TB activities from ART centres

The monthly HIV-TB report from all the ART centres should be sent to SACS latest by the 10th of every month electronically in the prescribed format. (LAC plus will also maintain a HIV- TB line list but will send the monthly report only to their nodal ART centre and not to SACS). These reports will be compiled by the Monitoring & Evaluation Officer at SACS. Any discrepancies in the report should be immediately brought to the notice of JD/DD/In-charge Basic Services. The same should be shared with the CST In-charge/RC to take corrective actions, if any. The monthly report from all the centres should be finally checked by JD/DD (BSD) and sent to the Programme Officer (HIV-TB), NACO &CTD at tbhiv@rntcp.org by the 15th of the month. A copy of the same should also be marked to the State TB Cell, CST consultant/In-charge CST at SACS and concerned RC. It should be clear that reports from individual ART centres are not to be sent directly to NACO/CTD.

6.3 Training and recording/reporting formats

The CST-In-charge at SACS and the RC need to ensure the timely completion of the following activities:

- 1) Completion of training of all MO/SMO (ART) on “Basic TB/HIV module for ART centre staff” at the respective CoE. One day training for all other ART centre staff (excluding trained MO/SMO) is also to be organized at the state/regional level. The RC/CST-In-charge and WHO RNTCP consultants can facilitate this training

- 2) The ART SMO/MO should categorize TB patients and refer to the nearest RNTCP centre, hence it is important to inform them about the existing RNTCP guidelines of categorisation and TB treatment protocols. For the same, one day training has to be organized for MO/SMO (ART) on “RNTCP module for medical officers”. This training will be organised by the state TB cell in coordination with CST nodal person at SACS and RC, if already not done during induction or refresher training
- 3) Availability of all the reporting formats (HIV-TB Line list, HIV-TB register and monthly HIV-TB reporting format) at the ART centres need to be ensured. The line list can be printed in normal page at the ART centre itself and the monthly report is to be sent to SACS as a soft copy. The TB/HIV register should be printed by SACS from IEC component of the ART grant.

6.4 Cotrimoxazole Preventive Therapy CPT

CPT for all the HIV infected TB patients and other eligible patients will be procured by SACS from funds available for purchasing drugs for Opportunistic Infections. However all efforts should be made to get the CPT from the health facility and ensure that it is provided for one month and not for one week or so.

6.5 Review of Records

During the supervisory visits to ART centres, CST officers/RC to ensure that they review monthly reports, line lists, registers for HIV-TB managed at the ART centres.

6.6 Patient flow for DOTS

After receiving the sputum results, the MO of the Health facility/ ART centre is responsible for the categorisation of the patient for starting TB treatment. The MO of the health facility is responsible for providing treatment, determining the DOT centre which is convenient and near to the patients residence. DOT provider who is acceptable and accessible to the patient and accountable to the health system and making the patient-wise TB treatment box available at the DOT centre along with the TB treatment Card, TB Identity Card and sputum containers for morning samples for follow-up sputum examinations. The feedback to the treating physician who has referred for treatment is provided as soon as the patient is received at the DOTS centre within the district and through the District TB Control Officer (DTCO) if the patient is started on treatment outside the district. If the patient is admitted in the hospital then the treatment is started by the DOTS centre of the hospital and on discharge the patient is provided medicine for 1 week and referred to the nearest DOT centre for continuation of TB treatment.

6.7 Anti tuberculosis therapy and antiretroviral therapy

All TB patients co-infected with HIV should be treated with a rifampicin containing Anti-tubercular regimen under DOTS as per National Policy. In TB patients co-infected with HIV, ART should be started between 2 weeks to 2 months as soon as TB treatment is tolerated. In patients requiring concomitant administration of ART and anti-TB treatment, the ARV regimen should be modified by replacing Nevirapine with Efavirenz. On completion of TB treatment such patients should be shifted back to Nevirapine based ART, one week after completion of ATT. For further details refer to Module on HIV/TB Issues at HIV Care Settings.

6.8 Air Borne Infection Control

ART centres are frequented by large numbers of HIV-infected persons, who commonly develop TB. With such a high burden of TB patients in close proximity to large numbers of vulnerable patients, often very frequently visiting the ART centre, the opportunities for transmission are very common. Furthermore, environmental factors common in ART centres may add to the risk of spread, particularly if crowding is there, natural ventilation is inadequate, or re-circulating air-conditioners are in use.

ART centres are required to initiate the following simple administrative and environmental measures aimed at reducing exposure of HIV-infected patients to M. Tuberculosis:

6.8.1 Infection control activities for facility management and ART nodal officers

- ◆ All the team members of ART Centre shall be trained in Universal Workplace Precaution, Waste segregation and disposal and Airborne Infection Control Practices, with special reference to tuberculosis.
- ◆ Conduct TB risk assessment, in collaboration with RNTCP and NACO
- ◆ Developing a written TB infection control plan by Hospital infection control committee and ART nodal officer. This may be incorporated into facility infection control plan.
- ◆ Assigning responsibility for TB infection control at ART centres– Hospital infection control committee and ART nodal officer
- ◆ Display proper IEC material on cough and hand hygiene practices in the hospital, hospital waiting area, ART centre, and particularly the waiting area of the ART centre. Notice to be put up that patients with cough shall be seen on priority
- ◆ Make surgical masks, tissues, and appropriate no-touch disposal receptacles available.

6.8.2 Location and design of ART centres

- ◆ Located separately from Chest clinics, Direct Microscopy Centres, or DOT Centres, with no shared waiting areas.
- ◆ Have a well ventilated waiting & seating area. Open outdoor roofed additional waiting areas are encouraged.
- ◆ Have a separate, well-ventilated waiting area for respiratory symptomatic wherever possible (particularly busier ART Centres).
- ◆ Adherence to ventilation standards for airborne infection control (>15 air exchanges per hour [ACH] throughout) should be ensured. Where natural ventilation is of concern, augmented ventilation through the well-planned use of supply and/or exhaust fans may be considered, if installations are properly designed and maintained, and electrical power is consistently available.
- ◆ As far as possible, use of re-circulating (split) air conditioners should be avoided as these invariably are implemented in a way that prevents adequate fresh air entry and exit. Any cooling/heating systems should be implemented in a way that does adheres to ventilation standards (>15 ACH).

6.8.3 Screening of clients for respiratory symptoms

- ♦ Care coordinators or nurses should screen all clients arriving at ART centre as early as possible for respiratory symptoms. Patients with respiratory symptoms should be educated on cough hygiene, kept in a separate well-ventilated waiting area if possible, and fast-tracked through their visit.
- ♦ Education on cough Hygiene for persons with respiratory symptoms
- ♦ Educate HCWs, patients, family members, and visitors on the importance of covering their cough to help prevent the transmission of airborne infections (both TB and viruses)
- ♦ Instruct patients about covering their mouth and nose with a tissue when coughing and dispose of used tissue in waste containers;
- ♦ Provide a disposable surgical mask to coughing patients if possible.

6.8.4 Fast Tracking of known pulmonary TB patients and persons with respiratory symptoms

- ♦ Fast-tracking of patients with respiratory symptoms is critical to reduce the time the patient is in the facility, so to reduce possible contamination of air and spread of disease
- ♦ Community care coordinator or nurse of the ART Centre shall facilitate the fast-tracking of patients with respiratory symptoms.
- ♦ They will be helped by the nurse to get them counseled by the counselors, examined by the doctors and provided with the drugs quickly, without making them waiting in the regular queue.
- ♦ TB suspects shall be referred to the DMC / DOTS centre for their sputum smear examination as a part of Intensified Case finding. This will facilitate early recognition and identification of possible pulmonary TB patients.
- ♦ Signboard display of the fast-tracking policy within the ART centre should be visible to avoid confusion among waiting patients.

Care of HIV Exposed Infants and Children

In India, with 27 million pregnancies annually, and an estimated overall HIV prevalence of 0.48 % in antenatal women, it is estimated that there are nearly 43,000 HIV-infected pregnant women annually. It is also estimated that about 1,05,000 children are living with HIV.

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 major challenge globally. 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.

With the tremendous expansion in HIV programme in PPTCT, ICTC, ART (for adults and children) including access to Early Infant Diagnosis (EID) for HIV testing of infants < 18 months old – it is now possible to ensure that HIV-exposed and infected infants and children get the required essential package of care.

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

1. To closely monitor HIV-exposed infants and children for symptoms of HIV infection
2. To prevent opportunistic infections by providing Cotrimoxazole prophylaxis to all HIV-exposed infants from 6 weeks of age
3. To identify HIV status early through early diagnosis of infant/child using DNA/PCR and final confirmation of HIV status at 18 months by HIV antibody test
4. To provide appropriate treatment including ART as early as possible
5. To reduce HIV related morbidity and mortality and improve survival.

7.1 Early Infant Diagnosis

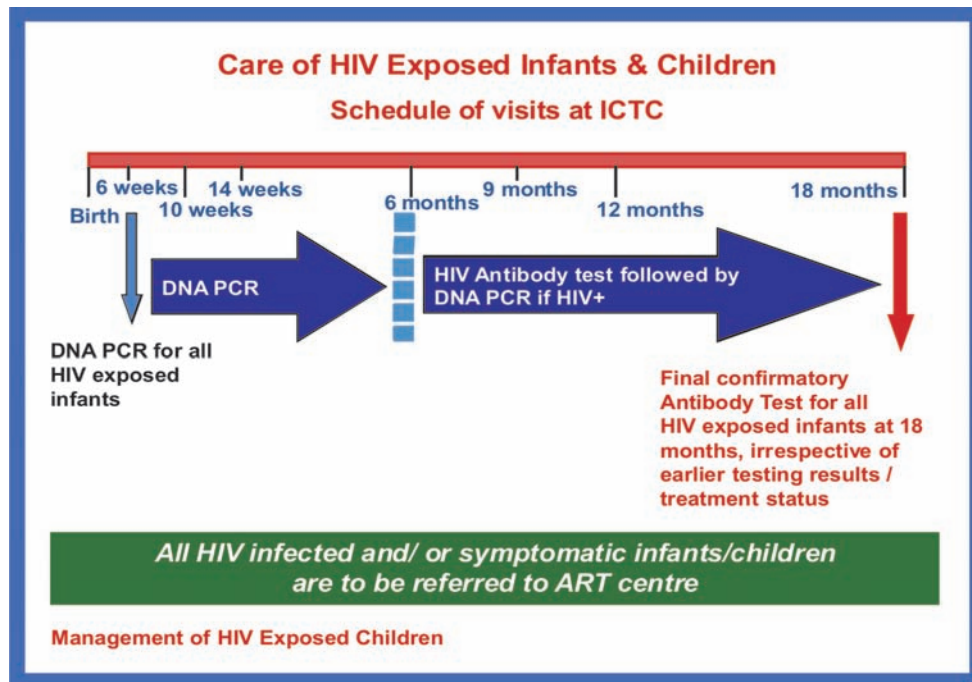
The diagnosis of HIV infection in infants younger than 18 months is different from that in adults. The standard diagnostic tool for HIV infection in adults, testing for antibodies to HIV antigens, has limited utility in newborns and infants because of the trans-placental transfer of maternal antibodies.

Most infants born to HIV positive mothers will test positive using standard HIV antibody tests such as ELISA or rapid tests. Maternal antibodies are present in an infant's blood for up to 18 months after birth (until the level of maternal antibody falls below limit of detection at 18 months) making it difficult to differentiate maternal from infant antibody and hence hinders establishing the definitive diagnosis especially positive diagnosis of HIV by rapid tests and ELISA.

The direct detection of the viral products has to be employed in the HIV exposed babies to confirm the HIV infection status of the baby. Such a test with proven track record is the qualitative DNA PCR, which detects the HIV-1 pro-viral DNA integrated into the host cell genome.

7.1.1 Schedule of visits for HIV exposed infants and children <18 months

All HIV exposed infants and children regardless of HIV status will be followed-up until 18 months of age for care, monitoring and the final confirmatory HIV antibody test at 18 months. The schedule of visits for follow up care will be as follows:



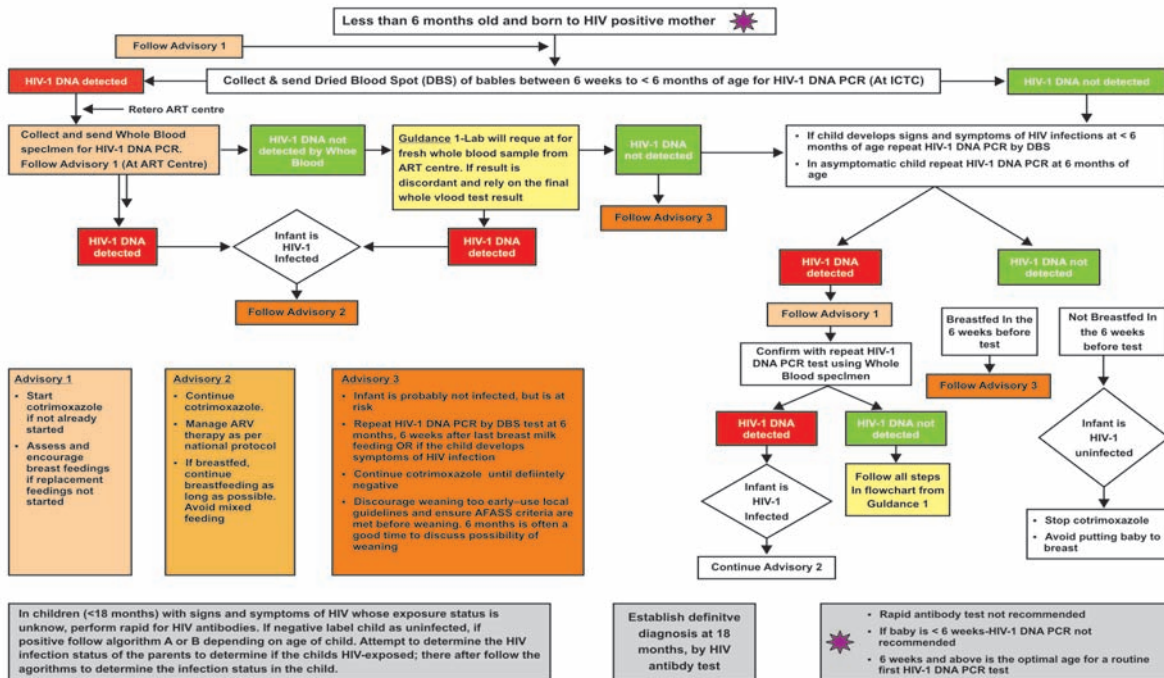
7.1.2 Diagnosis of HIV Exposed Infants & Children: General Principles

- ♦ **Follow two different diagnostic algorithms**
 - Algorithm A Infants >6 weeks but <6 months old and born to HIV positive mother
 - Algorithm B Child of aged 6-18 months born to HIV positive mother
- ♦ **First HIV DNA PCR test sample at ICTC (Dry blood spot)**
- ♦ **If DBS is reactive for DNA, Second sample for DNA PCR test (whole blood) will be collected at ART Centre**
 - a) A reactive DNA PCR test with WBS indicates the infant/child as HIV-1 infected
 - b) A negative DNA PCR test with WBS in those with positive DBS test indicates discordance between the first and second tests; needs a tie breaking third DNA PCR test from the whole blood sample to be taken at ART centre
- ♦ **Second sample for DNA PCR test (whole blood) taken at ART Centre for the tie-breaker**
 - a) A positive DNA PCR by WBS test reveals the infant/child as HIV-1 reactive
 - b) A negative DNA PCR by WBS test reveals the infant/child as HIV-1 reactive

- ◆ Final confirmatory Antibody Test for all HIV exposed infants irrespective of earlier testing results / treatment status at 18 months

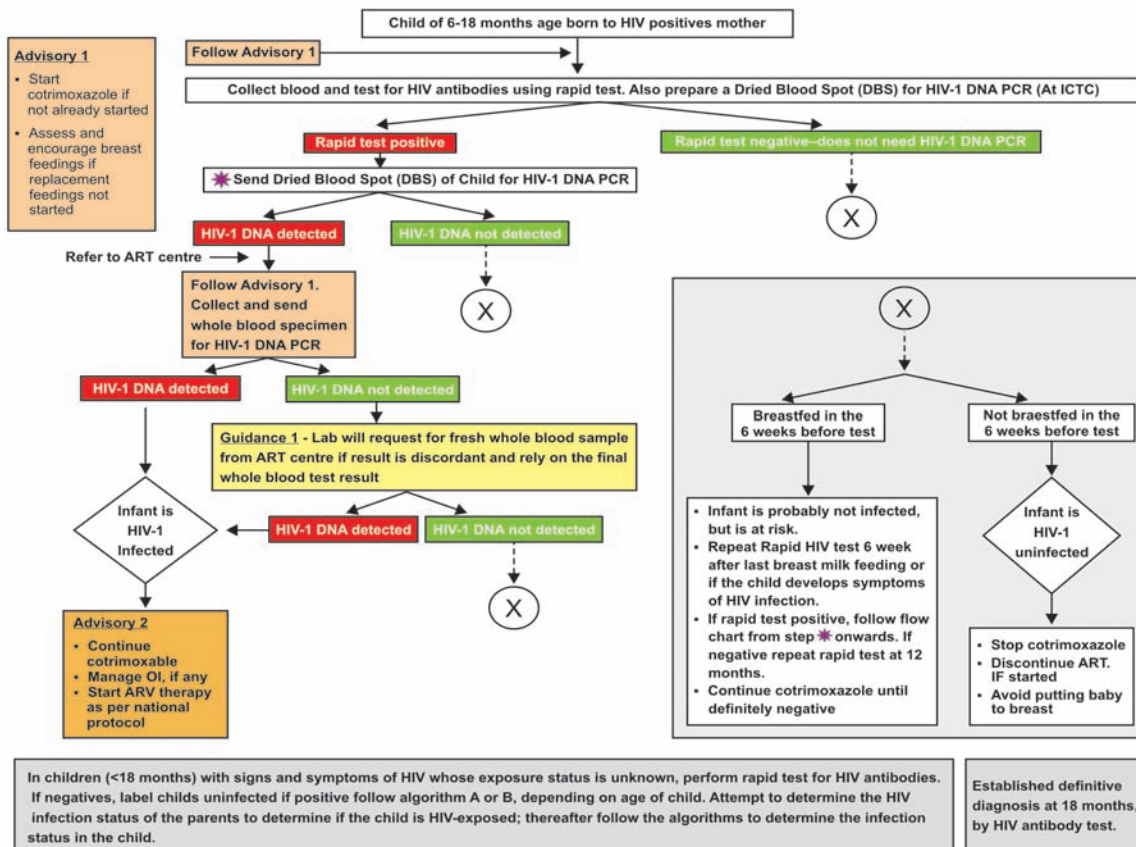
TESTING ALGORITHM FOR HIV-1 EXPOSED INFANTS AND CHILDREN < 18 MONTHS

A < 6 months



TESTING ALGORITHM FOR HIV-1 EXPOSED INFANTS AND CHILDREN <18 MONTHS

B = 6-18 months



7.2 Role of ART Centres in Care of Exposed Child

All HIV exposed infants and children will be followed-up by ICTC for DBS testing. Those found reactive with DBS will be referred to ART Centre for WBS with following documents:

- ♦ DBS report
- ♦ Referral form

This referral will be facilitated by PPTCT (IL&FS) outreach workers. Such patients will directly report to the counselor at the ART centre.

Follow up of the exposed Child

Advisory	Time of intervention	Recommendations
1	In all the HIV exposed infants and children aged <18 months, even before their HIV status is known	Start Cotrimoxazole if not already started Assess and encourage breast feeding, if replacement feeding not started
2	In all the HIV exposed infants and children aged <18 months, having their HIV status is confirmed by HIV-1 DNA PCR (DBS as well as WBS)	<ul style="list-style-type: none"> ♦ Continue Cotrimoxazole ♦ Manage OI, if any ♦ Start ARV therapy as per national protocol ♦ If breastfed continue as long as possible, mixed feeding to be avoided
3	In all the HIV exposed infants and children aged <18 months, having their both the blood samples (DBS & whole blood) tested negative by HIV-1 DNA PCR	<ul style="list-style-type: none"> ♦ Infant is probably not infected, but is at risk ♦ Repeat HIV-1DNA PCR by DBS test at 6 months, 6 weeks after last breast milk feeding OR if the child develops symptoms of HIV infection ♦ Discourage weaning too early – Use local guidelines and AFASS criteria are met before weaning. 6 months is often a good time to discuss possibility of weaning

Roles and Responsibilities of staff at ART centre

The roles and responsibilities of various personnel providing care to the HIV exposed infant/child at the ART centre are described below. The flow of children at ART centres referred from ICTC is described in Fig no. 4.

1. Medical Officer / SMO

- 1) Overall in-charge of HIV exposed infant/child at ART centre
- 2) Check documents brought with infant/child referred from ICTC and ascertain reason for referral
- 3) Clinically assess infant/child for signs and symptoms of HIV and OIs
- 4) Ensure all babies referred from ICTC with DBS DNA detected undergo WB collection
- 5) Refer to counselor for counseling and written consent
- 6) Refer to laboratory technician for WB specimen collection

- 7) Take WB specimen for HIV exposed infant/child
- 8) Ensure a repeat WB specimen is taken for infants/children with discordant results
- 9) Ensure all HIV infected infants/children are followed up at ART centre and managed according to paediatric guidelines
- 10) Ensure clinical and developmental assessment, CPT, feeding advise, immunization, growth monitoring and nutritional evaluation at each visit to ART centre
- 11) Initiate ARV in all HIV positive infants < 24 months, irrespective of clinical stage/ CD4 count, irrespective of clinical stage/ CD4 count
- 12) Start ARV in children > 24 months according to clinical and CD4% criteria
- 13) Refer HIV uninfected infants/children back to ICTC with EIC-4 and EIC-5
- 14) Ensure every child goes to ICTC from which referred for a definitive diagnosis at 18 months by antibody test
- 15) Ensure documentation in ART centre documents (EIC-1, EIC-2, EIC-5, EIC-6, EIC-7, EIC-8)
- 16) Oversee the roles and responsibilities of other ART centre staff
- 17) Report to SACS/NACO.

2. Counselor

- 1) Check documents brought with infant/child referred from ICTC
- 2) Do the pre-test counseling for WB collection for infants/children referred from ICTC and fill the consent form
- 3) Fix date for report collection
- 4) Refer infant/child to MO for clinical assessment at each visit if not already assessed
- 5) Refer infant/child for WB collection to MO/Laboratory Technician
- 6) Ensure all infants/children tested by WB collect report from ART centre
- 7) Do the post-test counseling and communicate test result
- 8) If DNA is not detected by WB testing explain that the result is discordant with DBS result at ICTC.
- 9) Counsel for and ensure repeat WB collection for discordant result and do post-test counseling according to final WB test result
- 10) If the infant/child is uninfected for HIV refer back to ICTC with EIC-4 and EIC-5
- 11) Ensure follow up and management at ART centre if infant/child is HIV infected
- 12) If infant/child is HIV infected counsel for regular follow up visits at ART centre, adherence to ARV and CPT
- 13) Counsel mother/caregiver for definitive antibody test at 18 months at ICTC
- 14) Coordinate with ORW at ICTC/Community Care Coordinator to track any HIV exposed infant/child who has missed a visit and ensure infant/child is continued on care, support and treatment for HIV exposed infant/child
- 15) Report all progress pertaining to exposed infant/child care to MO on a regular basis.
- 16) Complete documentation in the following documents:

Table 1: Documents to be filled by ART centre counselor

S.No	Name of the Document	Document Code	Column Numbers
1	Consent Form	EIC-1	All
2	ART Centre HIV Exposed Infant/Child Register	EIC-6	All

3. Laboratory Technician

- 1) Check that infant/child fulfils criteria for WB collection
- 2) Collect/assist in WB collection for infants/children referred from ICTC with DNA detected by DBS on the 2nd and 4th Tuesday of the month
- 3) Package, store and transport WB specimens according to laboratory guidelines and WB transport plan
- 4) Do other testing as per ART guidelines
- 5) Coordinate with reference lab to avoid delays in collection of test results
- 6) Hand over all test reports to the counselor for further communication to MO and mother/caregiver of exposed infant/child
- 7) Maintain stocks and update registers on a daily basis.
- 8) Complete documentation in the following records.

Table 18: Documents to be filled by ART centre laboratory technician

Sl. No	Name of the Document	Document Code	Column Numbers
1	HIV DNA PCR Test Requisition cum Result Form (TRRF)	EIC-2	A-R
2	Corrective Action Log	EIC-7	All
3	HIV DNA PCR Specimen Delivery Checklist	EIC-8	A-C, E-G, K-M

4. Nurse

- 1) Counseling of mother/caregiver of infant/child as relevant for all activities
- 2) Coordinating, streamlining and guiding mother/caregiver for various activities within and outside the facility
- 3) Growth monitoring, nutrition and immunization of exposed child, counseling and guidance on infant feeding
- 4) Assist in WB collection
- 5) Refer to pharmacist for Cotrimoxazole and ARV supplies
- 6) Assist in documentation and record keeping

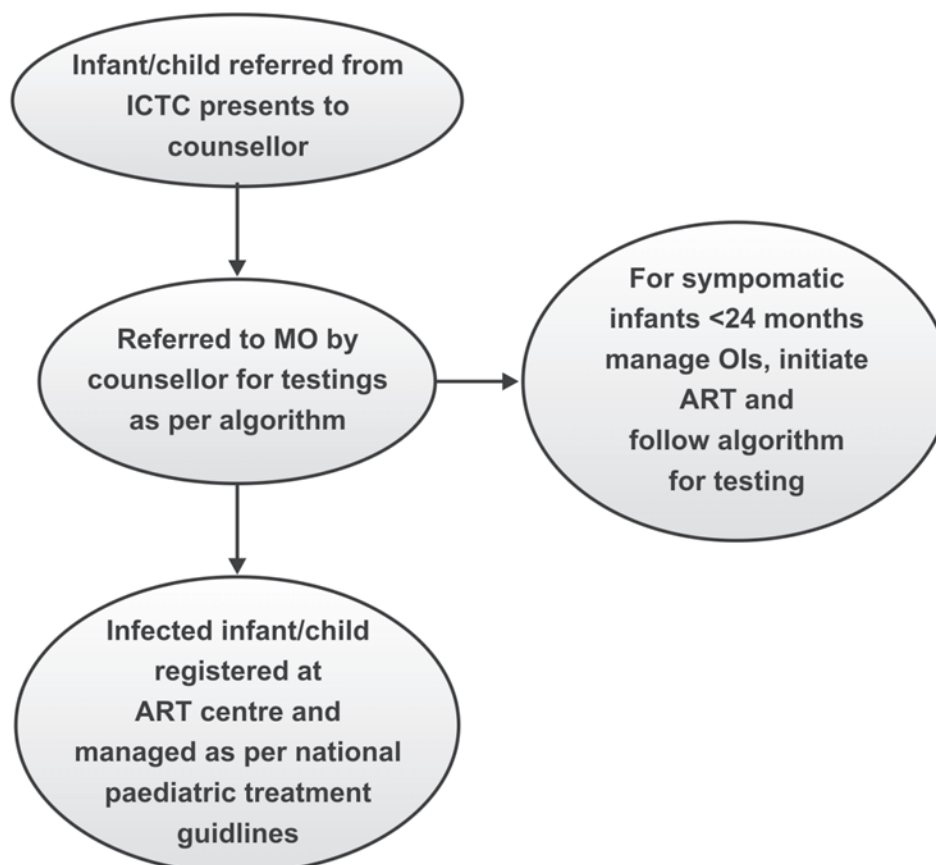
5. Pharmacist

- 1) Dispense drugs prescribed (CPT, ARV, others)
- 2) Check adherence to prescribed drugs
- 3) Drug supply management
- 4) Stock and stock register maintenance.

6. Care Coordinator

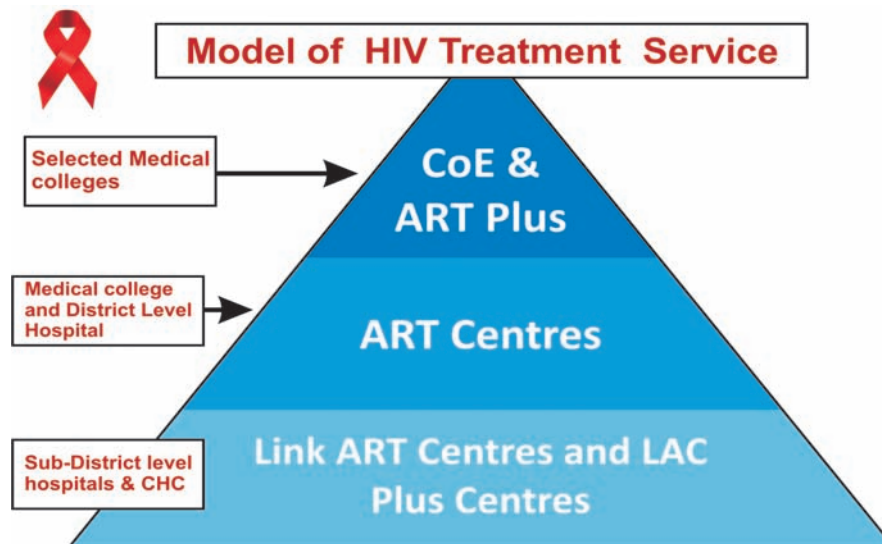
- 1) Coordinate with Community Care Centre
- 2) Keep track of adherence of infants/children on ARV
- 3) Counseling as relevant for visits and management
- 4) Patient retrieval where necessary, as far as possible.

Figure 4: Operational flow at ART centres



Second Line ART Related Activities

In order to improve access to second line ART to PLHIV, linkages between ART centres and CoE's/ ART plus centres have been developed. Besides this, centres with high load of patients on second line ART have been upgraded to ART Plus centres in order to ensure timely assessment and initiation of patients requiring alternative first line/ second line ART. The list of CoE/PCoE/ ART Plus centres is at **Annexure 20**.



For Clinical assessment a two layered Clinical Expert Panel has been established : the National AIDS Clinical Expert Panel (NACEP) at national level (NACO) and State AIDS Clinical Expert Panel (SACEP), which is constituted at each CoE and ART Plus centre.

8.1 National AIDS Clinical Expert Panel (NACEP)

The functioning of NACEP is coordinated by NPO (ART). This panel has representatives from TRG, institutions or independent experts deemed most appropriate for the query under consideration. Hence, the composition of the NACEP is dynamic and its composition will vary depending on the type of technical query. This is to ensure that most appropriate response and guidance is provided for the query by the variety of experts and expertise on various areas under treatment and care for HIV. Most of NACEP work will be on e-consultations.

8.2 State AIDS Clinical Expert Panel (SACEP)

Patients experiencing treatment failure with first line ART are referred to the Centres of Excellence/ ART plus centres for further evaluation and second line treatment, as per linkage plan.

These CoEs/ART plus centres have a panel of experts referred to as State AIDS Clinical Expert Panel (SACEP). The SMO/ MO from ART centre at CoE/ART plus should also attend SACEP meeting by rotation. The format to send query to SACEP is at **Annexure 16**. The SACEP consists of:

- 1) Programme Director of CoE/Deputy Programme Director/Nodal Officer of ART centre
- 2) External ART expert (panel to be formed by NACO, preferably not from the same ART centre)
- 3) Regional Coordinator/Joint Director (CST)/ Consultant (CST) at SACS. In case of ART plus centres, DAPCU Officers may attend SACEP meeting in place of SACS officials)
- 4) One pediatrician from the institution shall attend if there are children among the list of referrals.

8.3 Linkages with Centres of Excellence

ART centre not linked to any ART Plus centre; need to refer patients with suspected treatment failure or drug toxicity to the CoE. ART centres should follow the alternative/ second line ART guidelines and tools for referring patient to CoE with toxicity and suspected treatment failure.

8.4 ART plus Centres

Twenty one ART centres across the country have been identified as ART Plus centres. These centres would carry out the assessment and initiate treatment (if req) for alternate first line and second line ART.

Roles and responsibilities of ART Plus centres:

- 1) Assessment by the Clinical Expert Panel: The patients shall be assessed for the initiation alternative first/ second line ART from ART centre and the linked centres. The ART Plus centres should follow the guidelines established by NACO for alternative and second line ART
- 2) Viral load testing: Patients who are recommended for VL testing need to go to the linked CoE for testing. Sample would be taken at CoE and the report shall be sent to the ART Plus centre as per the protocols laid down by NACO
- 3) Provision of ARV drugs: If found eligible for alternative/ second line ART, treatment should be initiated at the ART plus centre and the patient should be referred back to the referring centre as per second line ART initiation guidelines
- 4) Monitoring and Evaluation: Monitoring and evaluation tools similar to CoE's are to be maintained at the ART Plus centre
- 5) Referral back: The patients initiated on alternative/second line ART should be referred back to the referring centre as per the CoE guidelines on second line ART.

8.5 Steps for referral for alternative/second line ART

Protocol for referral by ART centre to SACEP (State AIDS Clinical Expert Panel):

Step 1	ART centre shall follow Protocol A1.1 (Second line ART guidelines) for suspect treatment failure. ART centre shall email details (brief ART history, clinical stage & serial CD4 values, reasons for referrals) of patient to COE/ART Plus Centre to get appointment dates in the proper format.
Step 2	SACEP coordinator of COE/Data Manager at ART Plus Centre shall get the patients history reviewed by appropriate technical person and give appointment date/time to the referring centre.
Step 3	The referring ART centre shall then communicate the date/time to patient by phone, and counsel the patient for suspect treatment failure and need for SACEP review.
Step 4	Referring ART centre should send photocopies of patient records together with Referral/Reply Form and confirms that SACEP coordinator/ data manager has received it.

High index of suspicion is required

Look for the following among patients who have been receiving first line ART for at least 6 months:

- 1) New OIs/recurrence/clinical events after 6 months on first line ART(after ruling out IRIS)
- 2) Clinical deterioration in spite of good adherence to therapy
- 3) Progressive CD4 count decline
- 4) Slow/no clinical improvement over 6-12 months, associated with stationary CD4, despite good adherence

Some issues for consideration

1. Current clinical event must be differentiated from IRIS
2. Certain WHO clinical stage 3 conditions (e.g. Pulm. TB, severe bacterial infections) may indicate treatment failure and thus require consideration of second line therapy
3. Certain WHO clinical stage 4 conditions (e.g. Lymph node TB, uncomplicated TB pleural disease, recurrent bacterial pneumonia) may not indicate treatment failure and thus do not require consideration of second line therapy
4. Without any concomitant infection transient CD4 cell count decrease

Scheme for Link ART Centres and LAC Plus Centres

Background

The field observation and results from operational research studies have revealed that distance from patient's residence to ART Centres, geographical barriers and economic consequences, thereof, are the main constraints in accessing ART services and affect the adherence to treatment. The ART services are presently being rolled out through ART centres located mainly in medical colleges, tertiary hospitals and district hospitals. As the antiretroviral treatment is a lifelong therapy and drugs are generally provided once in a month, the frequent visits lead to inconvenience, long travel distance and cost to the patients. This may lead to sub-optimal drug adherence and risk of early drug resistance. Hence, in order to make the treatment services easily accessible to PLHIV, it was decided to set up Link ART Centres at ICTCs in the district /sub- district level hospitals/CHCs nearer to the patient's residence. These centres are linked to a Nodal ART centre and function as its outreach units.

The main functions envisaged for LAC are providing ARV drugs to patients on ART, monitoring of patients on ART, treatment of minor Opportunistic Infections (OIs), identification and management of side-effects and reinforcement of drug adherence on every visit. At present, there are 678 functional Link ART centres in the country. It is planned to gradually scale up LACs to 1500 by 2017 (NACP IV target). As a 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 services has decreased.

Considering the benefits and the success of the LAC scheme, it was decided to upgrade select Link ART Centres to include Pre- ART management also and designate them as "LAC plus". This shall help in integrating HIV care into general health system and reduce loss of patients between ICTC and Care Support and Treatment (CST) services. The detailed guidelines for LAC/LAC plus are available separately also.

9.1 Objectives of Link ART Centres/ LAC Plus

1. To reduce the travel cost and travel time in accessing ART services
2. To increase the access to HIV care for the PLHIV
3. To improve the drug adherence of patients on ART
4. To bridge the gap between counseling & testing services and Care, Support & Treatment services
5. To integrate HIV Care, Support & Treatment services with the Primary/Secondary Health Care system (NRHM).
6. To build the capacity of the health care providers at the Primary/secondary Health Care Level for Care, Support and Treatment services for sustainability of services. (Integration with NRHM)

9.2 Functions of LAC

The functions of LAC and LAC plus are described below:

9.2.1 Drug dispensing

LAC shall be responsible for providing ARV drugs to stable patients on ART linked out from Nodal ART Centre following established procedure. LAC/ LAC plus shall not initiate/modify ART in any patient at any point of time.

9.2.2 Monitoring of PLHIV on ART

LAC is responsible for ARV drug distribution to stable patients on ART linked out from Nodal ART Centre. LACs shall monitor the patients on ART in terms of OIs, Side Effects of drugs, Drug Adherence. Referral to the ART centre shall be required in case of major OI, serious side effect of drugs, pregnancy etc. LAC shall also be responsible for patient follow up to maintain optimum drug adherence, prevent and trace MIS and & LFU cases of both pre-ART & ART categories.

9.2.3 OI Treatment & prophylaxis

LAC shall also identify & treat minor OIs and provide in-patient care whenever required. Depending upon the capacity including diagnostic facilities and availability of drugs at the facility, LAC may provide treatment of other OIs as well.

9.2.4 HIV TB co infection

All PLHIV shall be screened for TB during every visit and all patients with symptoms of TB should be referred to the nearest RNTCP unit for diagnosis and if found to have TB should be sent back to nodal ART Centre before ATT initiation, so that their ART regimen can be modified accordingly.

9.2.5 Psycho-social Functions

LAC staff shall provide psychological support, counseling on adherence, nutritional & positive prevention to PLHIV accessing the Link ART centre.

9.2.6 Tracing LFU & MIS (Pre-ART & On ART)

Daily due list of PLHIV on ART shall be maintained by LAC. The MIS/ LFU cases shall be traced by counselor through phone and outreach. Concerned ICTC, Link Workers, DLN and other outreach workers should also be involved in tracing of MIS/ LFU cases

In addition to the functions mentioned above for LAC, the LAC plus shall also perform following functions:

9.2.7 Pre - ART Care

The patient detected HIV positive at ICTC would be referred to nearest LAC plus/ ART Centre as per patient's convenience for registration in HIV care, baseline investigations and further follow up. The blood sample for CD4 testing for PLHIV registered at LAC plus shall be collected at LAC plus itself on a pre-fixed day and sent to nodal ART Centre. Pre-ART follow up shall be done at LAC plus till the time PLHIV becomes eligible for ART or has a major OI. Once the PLHIV becomes eligible for ART, he/she would be referred to Nodal ART Centre. LAC plus shall also identify & treat minor OIs in pre-

ART patients and provide in-patient care, whenever required. Depending upon the capacity including diagnostic facilities and drugs, the facility may provide treatment of other OIs as well. The PLHIV shall also be referred to nodal centre for any other illness that cannot be managed adequately at LAC plus.

9.2.8 Screening of PLHIV for TB symptoms

All PLHIV should be screened for TB and all patients with symptoms of TB should be referred to the nearest RNTCP unit for diagnosis and treatment of TB and to nodal ART Centre for initiation of ART. Intensified case finding for TB should be undertaken by LAC plus as per guidelines. The LAC plus shall have same HIV/TB tools as maintained at ART centre. However, they shall send the information of completed line list to their nodal ART Centre only where it shall be compiled and sent to SACS as per established procedure.

9.2.9 Tracing MIS/ LFU (Pre-ART) cases

CD4 due list for Pre-ART PLHIV shall be maintained by LAC plus. The MIS/ LFU cases shall be traced by nurse & counselor through phone and outreach. Concerned ICTC, Link Workers, DLN and other outreach workers shall also be involved in tracing of MIS/ LFU cases.

Functions of LAC	Functions of LAC plus
1. ARV drug dispensing	1. ARV drug dispensing
2. Monitoring of PLHIV on ART	2. Monitoring of PLHIV on ART
3. Counseling on adherence, nutrition & positive prevention	3. Counseling on adherence, nutrition & positive prevention
4. Treatment of minor OIs	4. Treatment of minor OIs
5. Identification of side-effects of ARVs	5. Identification of side-effects of ARVs
6. Tracing of MIS/LFU cases	6. Tracing of MIS/LFU cases
7. Screening for TB symptoms on every visit	7. Screening for TB symptoms on every visit
8. Psychosocial support to PLHIV	8. Psychosocial support to PLHIV
9. Back referral to Nodal ART Centre as per specified criteria	9. Back referral to Nodal ART Centre as per specified criteria
	10. Enrolment of PLHIV in HIV care and treatment (Pre-ART Care)
	11. Pre-ART management inc. basic investigations and CD4 testing through linkage.
	12. Regular follow up of pre-ART patients not eligible for ART.
	13. Referral of eligible patients to Nodal ART Centre for ART initiation.
	14. Line listing and reporting of HIV-TB cases to Nodal ART Centre

LAC/ LAC plus shall not initiate/modify ART in any patient at any point of time

9.3 Manpower for LAC/LAC Plus

LAC shall utilize the existing human resources of the facility /ICTC and no other additional manpower shall be provided to the LAC. In view of the additional functions, one post of staff nurse per centre has been sanctioned for LAC Plus Centres.

9.4 Financial Assistance for Link ART Centres

Financial assistance for LAC is as follows: The funds provided to the LAC are as below:

a) One time grant for furnishing of centre	Rs. 15,000/-
b) Recurring grant :	
1. Internet connection @ Rs. 650/- p.m. x 12	Rs. 7,800/- p.a.
2. Cost of stationery, records and contingency (including phone)	Rs. 10,000/- p.a.
3. Cost of travel and drug transfer	Rs. 20,000/- p.a.
4. Remuneration of Nurse@ Rs. 8000-12,000/month (For LAC plus only)	Rs. 96,000/- p.a.
Total Recurring Grant:	
Link ART centre	Rs. 37,800/p.a.
LAC plus	Rs. 1,33,800/p.a

9.5 Responsibility of ART Centres w.r.t Link ART Centres

The patients linked out at LAC/LAC plus will continue to be the patients of Nodal ART centre. It will be the responsibility of nodal ART centre to mentor their LACs. There should be smooth coordination and regular communication between nodal ART Centre & LAC/LAC plus. Nodal Centres should guide the LAC in technical & operational issues. The staff of nodal centre should make periodic visits to LACs in order to facilitate and supervise the functioning of LAC/LAC plus

9.5.1 For "On ART" patients

- ♦ Link Out "on ART" Patients from Nodal ART Centre to Link ART Centre. Patients satisfying all of the following conditions will be shifted to Link ART centres:
 - I. Patients stabilized on ART for minimum 6 months at the Nodal ART centre.
 - II. Those who have exhibited weight gain and increase in CD4 count after 6 months of initiating ART.
 - III. Those who do not have any active OI.
 - IV. The patient is a resident of an area closer to the LAC than to the Nodal ART centre
 - V. Those who are willing to be shifted and collect their ARV from the LAC, once the above conditions are fulfilled.
- ♦ Patient being linked out should be given the following documents: (preferably the patient should have had a CD4 count done within last one month)
 - I. Photo-copy of the Patient Treatment Record (white card).
 - II. Original Patient Booklet (Green booklet) (already with the patient),
 - III. Original nodal ART Centre ⇒LAC referral/Link out form is at **Annexure 17**. Electronic copy of the link out form is also to be sent at the time of referral by e-mail. Nodal ART Centre as well as Link ART centre is expected to maintain folder of the link out forms.
 - IV. One month's drugs.

White card to be maintained at both centres, marked as LAC copy and ART centre copy. The card to be updated from photocopy /electronic copy received from NAC/LAC/LAC Plus

9.5.2 Transfer of Drugs

- ◆ ARV drugs stocks for 3 months of all PLHIV linked out in last 15 days shall be sent by the Nodal ART Centre at an interval of 15 days to the LAC through courier/postal service/care coordinator or any other staff of nodal ART Centre/LAC
- ◆ The supply should also include drugs for already linked out patients (due for drug supply) as well as for those linked out in the last 15 days along with a copy of the Nodal ART Centre to LAC referral/link out form for patients linked out during that period
- ◆ The TA/DA for contractual staff involved in drug transfer shall be given as per NACO/SACS guidelines and to Government staff it shall be as per State Government rules. This shall be borne under operational cost provided to the Nodal ART Centre if nodal ART centres staff is travelling or from recurring grant of Rs. 20,000/- given to LAC/LAC plus if their staff is travelling. The LAC recurring grant can be utilized for drugs sent by courier from nodal centre
- ◆ Drug stock reporting by Nodal ART Centre: The Nodal ART Centre shall not deduct the total quantity of drugs transferred to Link ART Centre in the monthly report sent to NACO. It should only deduct the drugs actually dispensed to the patient at the LAC /LAC plus during the month as reported in monthly reporting format from LAC/LAC plus to Nodal Centre.

9.5.3 Following activities will be done at Nodal ART Centre on a routine 6 monthly basis

- ◆ Clinical review, CD4 count, other required investigations of the patient. Review/Modification of the drug regimen , if required
- ◆ After first time of “link out”, drugs shall always be given from LAC only (including the month when patient is “linked in”). In case regimen is changed, one month drugs of new regimen shall be given by Nodal ART Centre
- ◆ Filling up of the ART copy of Patient Treatment record (white card) from the photocopy/electronic copy of the Patient Treatment Record (white card) and Patient Booklet (Green booklet)
- ◆ Refer back to LAC with next 3 months drugs to be transferred to LAC through established mechanism of drug transport
- ◆ Follow up with LAC if patient does not come for routine 6 monthly visit

9.6 Responsibility of ART Centres w.r.t Pre- ART patients (applicable for LAC plus only)

- ◆ Any patient detected positive in the ICTC (within the Health facility/ICTC in periphery) can be registered at the Link ART Centre plus in the HIV Care (Pre-ART) register by giving serial number as LAC plus registration number
- ◆ Patient Treatment Record (White card) shall be prepared and Patient Booklet (Green Booklet) shall be issued
- ◆ Pre -ART number shall be issued only by Nodal ART Centre after receiving blood sample for CD4 testing and enrolling the patient in their HIV Care (Pre-ART) register. One copy of White card (ART Centre copy) shall be maintained by the Nodal ART Centre after issuing Pre-ART registration number for that patient
- ◆ Blood sample will be collected at LAC once in a week preferably in morning hours and sample transport to be done to Nodal ART Centre for CD4 testing by Lab Technician

- ◆ ART centre will instruct the LAC to link in eligible patients for ART as per CD4/Clinical stage criteria
- ◆ Basic work up of the eligible PLHIV for ART shall be done at LAC Plus as per technical guidelines. If the facilities are not available at LAC, the investigations may be done at NAC
- ◆ Initiation of ART is to be done by Nodal ART Centre. Nodal ART centre is expected to follow up with LAC incase eligible patients for ART do not turn up for ART initiation within a stipulated time.

**White card to be maintained at both centres, marked as LAC copy and ART centre copy.
The card to be updated from photocopy/electronic copy received from NAC/LAC/LAC plus**

9.7 Communication

- ◆ The Nodal ART Centre and link ART centre shall have communication through telephone & email
- ◆ Number of patients shifted to Link ART centre in that week (Pre – ART and on ART)
- ◆ Number of patients referred to Nodal ART centre each week, reasons of referral and their subsequent management at the Nodal ART centre (Pre-ART & on ART).

9.8 Reporting formats to be used

- ◆ Copy of Link out/in format to be exchanged between Nodal ART Centre & LAC while linking out or linking in the patients and a soft copy of these are to be maintained by both Nodal ART Centre & LAC/LAC plus in separate folder
- ◆ Nodal ART Centre shall maintain electronic copies of the LAC records (Pre ART & On ART- Annexure 4B & 4C of LAC guidelines) and exchange it on monthly basis with LAC/LAC plus
- ◆ Centre wise monthly information of "On ART" Patients linked out to LAC/LAC plus (Annexure 4B of LAC guidelines):
 - I. This format will originate at nodal ART centre. The nodal ART Centre shall send the updated format (information about already linked out patients as well as those linked out during the reporting period) to LAC/LAC at the end of every month
 - II. LAC/LAC plus will send back the same after filling up required sections by 25th of next month
 - III. Section 1 to 8 will be filled by nodal ART centre
 - IV. Section 9 to 16 will be updated by LAC. Due date for CD4 count in LAC will be filled in red colour.
- ◆ Patient wise monthly information of Patients registered at LAC plus in Pre-ART care (Annexure 4C of LAC guidelines):
 - I. This format will originate at LAC plus. The LAC plus shall send the updated format (information about already enrolled in Pre-ART care as well as those enrolled during the reporting period) to nodal ART centre by 25th of every month
 - II. ART centre will send back the same after filling up the relevant section by last day of that month
 - III. Section 1 to 15 will be filled by LAC plus. Due date for CD4 test will be written in red
 - IV. Section 16 will be updated by nodal ART Centre.

- ◆ In view of the functions to be performed by Link ART centre it needs to have well developed linkages with Nodal ART Centre. The Nodal officer/SMO/MO of Nodal ART Centre and Link ART Centre In charge should exchange Mobile numbers of each other as well as e mails of both the centres
- ◆ The counterpart staff at Nodal ART Centre and LAC (i.e. Doctors, Counselors, Nurse and Pharmacist) should communicate regularly by phone and email for smooth functioning of the linkage.

The print out of these monthly formats will be maintained by nodal ART centre in separate ring binder files (one for each LAC/LAC plus) every month. Overall responsibility of maintaining these formats at ART centre lies with Data Manager

9.9 Mentoring visit by ART centre SMO/MO

The SMO/MO of the ART centre should visit the linked LAC/LAC plus for monitoring purpose periodically. During these visits the SMO/MO should:

- ◆ LAC registers; treatment records and referrals forms should be checked. The information in these registers should be compared with the monthly LAC report sent to the ART centre
- ◆ Drug stock registers and physical inspection of the ARV drugs should be done
- ◆ Assessment of the need and availability of OI drugs should be undertaken
- ◆ For LAC plus it should be checked that all the registered pre- ART patients have undergone CD4 testing and those eligible have been initiated on ART
- ◆ It should be ensured that white cards and green booklets are being made for all the patients registered at the centre
- ◆ Any programmatic concern should be discussed with the MO incharge and the counselor at the ICTC
- ◆ The ART SMO/MO can utilize the contingency amount for actual travel fare only as per the SACS guidelines and the visit report to be submitted to Nodal Officer ART and RC (CST)/SACS.

9.10 Reporting to NACO

The patients at Link ART Centre will remain the patients of Nodal ART centre and will not be shown as transferred out from the Nodal ART Centre. Instead the terms “linked out” / “linked” in should be used. The nodal centre will inform NACO about the total patients availing services at Link ART Centres in the monthly ART reporting format.

9.11 Mentoring & Monitoring of LAC

Mentoring and Monitoring of LAC is the responsibility of Nodal ART centre. LAC staff will be provided hands on training before operationalisation of LAC at Nodal ART Centre in presence of RC/ SACS officials. Further follow up, reinforcement of training mentoring and monitoring is to be done by Nodal ART centre. Staff at Nodal ART centre is expected to visit attached LAC from time to time by rotation. (Detailed operational guidelines for LAC & LAC Plus Centres are available at www.nacoonline.org)

Supply Chain Management of ARV Drugs

NACO introduced a change in the way ARV drugs are distributed to ART Centres starting with the procurement cycle of Financial Year 2011-12. ARV distribution follows a hub and spoke model where the suppliers deliver the entire quantity required by a state to the SACS which act as the hubs for further distribution of the required quantity of drugs to ART centres. The JD (CST)/officer in-charge of CST at SACS is the focal point for SCM at SACS. The staff from Procurement & Supply Chain Management unit at SACS shall be engaged in the logistics & record maintenance.

10.1 Responsibility of NACO

- ◆ NACO will be responsible for forecasting the state-wise need, indenting and procuring ARV drugs centrally and make them available to Consignees (SACS)
- ◆ Provide indicative annual quantity required by each ART Centre/COE/ART Plus centres to help SACS in further distribution of ARV drugs to facilities
- ◆ NACO will also facilitate interstate relocation in case of low stocks, near expiry drugs or during natural calamities and conflict situations.

10.2 Responsibility of SACS

- ◆ Appointing a nodal person in charge of Supply chain management
- ◆ Ensuring proper receipt and storage of drugs
- ◆ Arrange for space for safe storage of drugs at SACS level in the state
- ◆ Relocating the drugs to ART Centres as per requirement in two- three installments in line with the drug supplies
- ◆ Maintaining accurate records for all drugs received from suppliers/other states and distributed to ART Centres
- ◆ Monitor and analyse the stock positions at ART Centre for smooth supply chain management
- ◆ Ensure continuity and uninterrupted drug supplies at ART centre/LAC plus/LAC level
- ◆ Prevention of drug expiry by timely relocations within the state and if needed facilitate outside the state relocations with official directives from NACO
- ◆ Prevention of Stock outs by need based relocations
- ◆ Guard the drugs against misuse/pilferage/rodents/damage etc
- ◆ Quarterly physical count reconciliation of stocks
- ◆ Timely submission of Monthly ARV stock report to NACO.

10.3 Responsibility of ART Centres

- ◆ Ensuring proper receipt and storage of drugs
- ◆ Arranging space for safe storage of drugs
- ◆ Maintaining accurate records for all drugs received from SACS/other ART Centres/LAC and LAC plus centres and drugs dispensed to patients
- ◆ Monitor and analyse the stock positions at ART Centre
- ◆ Ensure continuity of drug availability at ART Centre
- ◆ Prevention of drug expiry/stock outs by timely reporting to SACS
- ◆ Guard the drugs against misuse/pilferage/rodents/damage etc
- ◆ Quarterly physical count reconciliation of stocks
- ◆ Timely submission of Monthly ARV stock report to SACS
- ◆ Transfer of ARV drugs to LAC as per requirement

10.4 Guidance to SACS

10.4.1 Regarding receipt of drugs

- ◆ Cross verify at the time of receiving the drugs that the exact amount is received against the allocated quantity and confirm the same to NACO/Logistic coordinator / Supplier / procurement agency/Regional Coordinator. Deviation if any should be highlighted for further actions
- ◆ Acknowledging the receipt after actual counting of drugs
- ◆ Forwarding copies of CRC to Procurement Agent & Procurement Division of NACO
- ◆ Mention receipt of quantity if received less or in seal broken condition.
- ◆ Stacking of drugs should be based on expiry dates FEFO procedures(First Expiry First Out)
- ◆ Accurate record keeping for all drugs received from suppliers / other states
- ◆ Refer to the revised guidelines sent from time to time by NACO.

10.4.2 Drug Storage:

- ◆ Arrange cartons with arrows pointing up and with identification labels, expiry dates and manufacturing dates clearly visible.
- ◆ Store drugs and other supplies to facilitate FEFO (First-to-expire, First-out) procedures
- ◆ Stack cartons at least 10cm (4 in) off the floor, 30cm (1ft) away from the walls and other stacks and no more than 2.5m (8ft) high
- ◆ Separate damaged and expired drugs and supplies from usable supplies.
- ◆ Remove these damaged drugs from inventory immediately and dispose them off using established procedures for disposal of drugs. SACS will be accountable for expiry of drugs in the state and will have to provide justification for the same
- ◆ Keep fire safety equipment available, accessible and functional.

10.4.3 Distribution of drugs to ART Centres

- ◆ Mechanism for drug transport / courier needs to be developed
- ◆ Drugs are to be distributed to ART centres, based on their requirement in two –three installments annually
- ◆ Minimum three months stock should be available at any given time at the ART centre and Link ART Centre. Immediate action is to be taken if drugs are available for less than THREE months
- ◆ Existing stocks at ART centres are to be taken care while making allocation to ART centres
- ◆ Accurate records are to be maintained for all drugs distributed to ART Centres
- ◆ State Drug Stock and Drug Distribution Register should be maintained on daily basis Periodical physical count of stocks should be done
- ◆ Stocks should always be distributed based on First Expiry First Out.
- ◆ Nearly 20 % of the received stock is to be kept by SACS as buffer quantity.

10.4.4 Record Keeping

- ◆ State Drug stock and Drug Distribution Register: This is used by the Store Officer / to input the inflow and outflow of stock. This is be maintained on daily basis
- ◆ Drug Distribution Register: This is used by the SACS warehouse to account for the ARV drugs distributed to the various ART Centres or sent to other states on daily basis. Drug stock register must be filled routinely. This is important because:
 - a) It provides consumption rate
 - b) Avoids stock outs
 - c) Avoids expiry
- ◆ Monthly report on ARV stocks is to be sent to NACO by 4th of every month as per format at Annexure 21
- ◆ Stock Reconciliation: This is used to determine the discrepancies between the Actual stock and the reported stock. Periodical physical count of stocks should be done and quarterly report to be maintained
- ◆ Goods Received Note: The Store Officer has to make this note acknowledging receipt of stock from the transportation agency and supplier. This is to certify that the Goods have been received duly inspected in good condition in accordance with the conditions of the contract and amendment if any
- ◆ Final Acceptance Certificate: The Store Officer has to prepare this note along with the Goods Received Note. The consignee has to prepare four copies of the GRN and FAC – one for the warehouse, and the remaining three for NACO, RITES and the Supplier
- ◆ Pickling List: This is made by the Store Officer after the stock has been dispatched to the various ART Centres. It keeps account of the stock that has been distributed.

10.4.5 Interstate Relocations

Any additional quantities of Drugs required should be intimated to NACO (artdrugs@gmail.com). NACO will arrange for interstate relocations.

Similarly, in case of excess stocks at SACS level, NACO should be informed for any interstate relocations if possible.

10.5 Guidance to ART Centres

10.5.1 Regarding receipt of drugs

- ◆ Cross verify at the time of receiving the drugs that the exact amount is received against the allocated quantity and confirm the same to SACS/Regional Coordinator
- ◆ Deviation if any should be highlighted for further actions
- ◆ Acknowledging the receipt after actual counting of drugs
- ◆ Mention receipt of quantity if received less or in seal broken condition
- ◆ Accurate records for all drugs received from SACS / other ART Centres should be maintained
- ◆ Refer to the revised guidelines sent from time to time by NACO.

10.5.2 Drug Storage

- ◆ Arrange cartons with arrows pointing up and with identification labels, expiry dates and manufacturing dates clearly visible
- ◆ Store drugs and other supplies to facilitate FEFO (First-to-expire, First-out) procedures
- ◆ Stack cartons at least 10cm (4 in) off the floor, 30cm (1ft) away from the walls and other stacks and no more than 2.5m (8ft) high
- ◆ Separate damaged and expired drugs and supplies from usable supplies
- ◆ Remove them from inventory immediately and dispose them off using established procedures for disposal of drugs. ART Centre will be accountable for expiry of drugs in the centre and will have to provide justification for the same.

10.5.3 Drug dispensing to patients

- ◆ Drugs are to be dispensed to patients as per the prescription of the SMO/MO
- ◆ Proper instructions should be given to patients while dispensing the medicines
- ◆ Accurate records are to be maintained for all drugs dispensed to the patients
- ◆ Drug stock and drug distribution register should be maintained on daily basis Periodical physical count of stocks should be done
- ◆ Drugs should always be dispensed based on First Expiry First Out.

10.5.4 Usage of Near Expiry of Drugs

- ◆ The drugs being issued to PLHIV should have at least 45 days left for expiry from date of issue by ART centre.
- ◆ The SACS should not issue ARV drugs having expiry date < 60 days
- ◆ THE DRUGS ARE ISSUED FOR ONE MONTH, so if a drug has expiry in August 2011, it can be used till 31st August 2011. Hence, this can theoretically be issued to patients with one month remaining in expiry i.e. before 31st of July 2011.

The list of Short of Expiry drugs and quantity which cannot be consumed within the time period specified should be intimated to SACS and Regional coordinator atleast before 3 months of expiry.

10.5.5 Record Keeping and reporting

Drug stock Register: This is used by the Pharmacist / to input the inflow and outflow of stock. This is maintained on a daily basis.

Drug Dispensing Register: Monthly report on ARV stocks is to be sent to SACS by the 2nd of every month as per the format at **Annexure 22**

- ◆ **Stock Reconciliation:** This is used to determine the discrepancies between the Actual stock and the reported stock. Periodical physical count of stocks should be done and quarterly report to be maintained
- ◆ Minimum three months stock should be available at any given time at the ART centre and the Link ART Centre. SACS should be immediately informed if any of the ART drug is available for less than THREE months
- ◆ Any excess stock beyond the consumption of ART Centre should be reported to SACS for timely relocation.

10.5.6 Transfer of ARV Drugs to Link ART Centres

- ◆ ARV drugs stocks for 3 months of all PLHIV linked out in last 15 days shall be sent by the Nodal ART Centre at an interval of 15 days to the LAC through courier/ postal service/ care coordinator or any other staff of nodal ART Centre /LAC.
- ◆ The supply should also include drugs for already linked out patients (due for drug supply) as well as for those linked out in the last 15 days along with a copy of the Nodal ART Centre to LAC referral/link out form for patients linked out during that period.
- ◆ **Drug stock reporting by Nodal ART Centre:** The Nodal ART Centre shall not deduct the total quantity of drugs transferred to Link ART Centre in the monthly report sent to NACO. It should only deduct the drugs actually dispensed to the patient at the LAC /LAC plus during the month as reported in monthly reporting format from LAC/LAC plus to Nodal Centre.

10.5.7 Procedure for disposal for expired drugs

Empty bottles/expired drugs should be destroyed to prevent recirculation. These should be destroyed at the centre itself following the procedure adopted in hospital for other drugs that expire in the hospital. The procedure for disposal for expired drugs is as below: -

1. Forming a committee of two- three persons including Nodal Officer;
2. Listing out the drugs expired along with batch no. and quantity expired (with date of expiry)
3. Separating the tablets from bottle
4. Destroying the tablets in incinerator / by dissolving in water and then disposing it if the incinerator is not available.
5. Removing the labels from the bottles (may be dipped in water for some time to separate out the labels)
6. The empty bottles to be disposed off in the municipal waste,
7. The quantity of expired drugs to be reduced from the balances and reported in the monthly report. Details for the same is to be emailed to SACS and artdrugs@gmail.com.

ANNEXURES

Annexure 1

Contact Details of Officers at NACO

Care, Support and Treatment Division					
Sl. No	Name	Designation	Mob. No.	Office. No.	E-mail ID
1	Dr. Mohd. Shaukat	ADG (CST)	-	43509918 23731805	adgcstnaco@yahoo.com
2	Dr B.B Rewari	NPO (ART)	9811267610	43616677	drbbrewari@yahoo.com
3	Dr. Reshu Agarwal	PO (CST)	9958380838	43509952	dr.reshuagarwal@gmail.com
4	Dr. Laxman Bharti	PO (ART)	9818369354	43616622	laxmannaco@gmail.com
5	Dr. Rita Prasad	PO (CCC)	9868112328	43509908	rpnaco@gmail.com
6	Dr. Sunny Sawarkar	TO (ART)	9911986990	43509995	drsunny.naco@gmail.com
7	Mr. Vipin Joseph	TO (Trg.)	9971802659	43616628	vipinjozaf@gmail.com
8	Ms. Utplakshi Kaushik	TO (CCC)	9910518732	43509903	utplakshi.naco@gmail.com
9	Mr. Saurav Kumar	TO (Logistics)	9718781985	43509927	cd4reports@gmail.com
10	Mr. RK Sachdeva	Finance Officer	9868256822	43509905	sachdeva.naco@gmail.com

Other Linked Persons					
Sl. No	Name	Designation	Mob. No.	Office. No.	E-mail ID
1	Dr. Sandhya Kabra	ADG (LS&BS)	-	43509917	labservices.naco@gmail.com
2	Dr. Tejashri kambli	PO (B & CR)	-	43509979	tejashri.naco@gmail.com/ djstneronaco@gmail.com
3	Ms. Melita Vaz	PO (Counselling)	9958949397	43509906	vazmelita@gmail.com
4	Dr. Avinash G Kanchar	PO (HIV-TB)	-	43509956	avinashkanchar@gmail.com
5	Dr. Raghuram Rao	PO (ICTC)	9322269113	43509956	drraghuramrao@gmail.com
6.	Dr. Geetanjali Kumari	National Consultant (PPTCT)	8588086193	43509921	npoictnaco@gmail.com

Annexure 2

Contact details of Regional Coordinators

Sl. No	Name	State	Contact no.	Email id
1	Dr. S. Thennarasu	Tamil Nadu & Pondicherry	9442161601	thennarasu.naco@gmail.com
2	Dr. A.S Valan	Tamil Nadu & Pondicherry	9445565836	drvalan.naco@gmail.com
3	Dr. Suresh Shastri	Karnataka and Kerala	9980999395	susha007@gmail.com
4	Dr. Sripati Dasmohpatra	West Bengal, Orissa, Jharkhand	9681182433	dr.sripati@gmail.com
5	Dr. Jasjit Singh Mallhi	Northern Region	9417444743	rcnorthnaco@gmail.com
6	Dr. Christopher Nathan	Andhra Pradesh	9866018671	chri.cstconsultant@gmail.com
7	Dr. K.V Emmanuel	Andhra Pradesh	9440774974	drkve9@gmail.com
8	Dr. Anwar Parvez Sayed	Maharashtra	9420703134	dr.anwarsayed@yahoo.co.in
9	Dr. Swapnali S. Patil	Maharashtra	9555731963	drswapnalimdacs@gmail.com
10	Dr. D. J Borah	North East	9435182292	djcstneronaco@gmail.com
11	Dr. Manish Bamrotiya	Rajasthan	9828434608	Bamrotiya.manish@gmail.com

Annexure 3

ART Centre Feasibility Visit Format (Initial Visit)

1. Name of the Health Facility:
2. Name of the in-charge:
3. Date of feasibility visit:
4. Name of members of feasibility visit team:
5. Background:
 - 5.i. Overview:
 - 5.ii. Health and HIV/STI in the District:
6. Organization and Infrastructure:
7. Space for the ART centre:
8. Human Resources:
9. NGO linkages:
10. Lab Investigations:
11. Conclusion:

I. General Information										
1	Name of the District:									
2	Name of the Hospital									
3	Type of Hospital									
4	Name of the Medical Superintendent									
5	Hospital Phone Number with code									
6	Complete postal address with pin code:									
II. Background Information										
7	Give the catchment area of the proposed site for ART Centre									
8	No of positives detected during last five year in the district/ catchment area									
9	% of ICTC Seroposivity in a.)General Clients b.) Pregnant Women									
10	No of LAC in the district/ catchment area									
11	No of patients on ART in the LAC in the district/ catchment area	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Name of the LAC</th> <th style="text-align: center;">No of patients on ART</th> </tr> </thead> <tbody> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> </tbody> </table>	Name of the LAC	No of patients on ART						
Name of the LAC	No of patients on ART									

12	Does the district already have ART Centre. If Yes, give names and Number of patients registered in HIV Care & On ART	Name of the ART Centre	No of patients on registered	No of patients on ART
13	Distance of the proposed site from nearest existing ART Centre			
III. Organization & Infrastructure				
Institutional Commitment				
14	Is the Director committed towards the National ART Program	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
15	Is the hospital administration Committed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
16	Has the Nodal Officer been identified and is committed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ICTC Functioning				
17	Is there an ICTC functioning in the hospital.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
18	How many rooms does the ICTC has			
19	Counselor in place			
20	No of HIV testing in the last year			
21	No of Positives			
LAC Functioning				
22	Is there an LAC Plus/LAC functioning in the Hospital	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
23	How many rooms does the LAC has			
24	Is the facility staff (LAC MO, Staff nurse,Paharmacist) committed towards LAC	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
25	No of patients registered and on ART at LAC Plus/LAC			
26	No of Positives			
General Information regarding the Hospital				
27.	No of Doctors available			
28	No of Beds available			
29.	No of Positive deliveries conducted in the last year			
30	Drugs available at the hospital pharmacy			
31	DOTS available	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

32	Human Resources		
a	Total Specialists available		
b	Physician	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c	Pediatrician	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d	Obstetrician	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e	Chest Physician	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f	Dermato-venreologist	<input type="checkbox"/> Yes	<input type="checkbox"/> No
g	Microbiologist/Pathologist	<input type="checkbox"/> Yes	<input type="checkbox"/> No
h	Others (Mention)		
IV. Space Identified for ART centre			
33	Location of the proposed ART Centre		
34	Total Area of the proposed site		
35	Linkages with Medicine OPD & other specialities		
36.	No of rooms		
a	Doctors		
b	Counsellors		
c	Data Operators		
d	Drug Storage & Pharmacist		
e	Lab Technician		
V. Nodal Officer and ART Team			
37	Has the Nodal Officer been identified and is committed (Give name)		
38	Has the ART Team been identified (Give names)		
VI. Lab investigations			
a	Hemogram	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b	RFT	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c	LFT	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d	Blood Sugar	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e	S. Lactate	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f	S. Lipase	<input type="checkbox"/> Yes	<input type="checkbox"/> No
g	Preganancy Test	<input type="checkbox"/> Yes	<input type="checkbox"/> No
h	CXR	<input type="checkbox"/> Yes	<input type="checkbox"/> No

i	Ultra Sound	<input type="checkbox"/> Yes	<input type="checkbox"/> No
j	Sputum for AFB	<input type="checkbox"/> Yes	<input type="checkbox"/> No
k	Urine Examination	<input type="checkbox"/> Yes	<input type="checkbox"/> No
l	VDRL	<input type="checkbox"/> Yes	<input type="checkbox"/> No
m	PAP Smear	<input type="checkbox"/> Yes	<input type="checkbox"/> No
n	Others (Mention)		

Issues	Suggested Follow up Action

Recommendation : Recommended to set up ART Centre

: Not Recommended (If Not Reasons for same)

Signature of the Feasibility Visit Team: 1.....

2.....

3.....

Annexure 4

Format for preparedness of new ART centre (Before Operationalization)

Name of the Hospital:

Name of the ART unit in-charge:

Date of appraisal/visit:

Name of the visiting persons:

Indicator	Readiness status		Problem identified /Remarks
Organization & Infrastructure			
Head of the health care facility (M.S)/ ART incharge committed to provide ART care and support	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ART unit strategically located in medical OPD	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Bank Account opened	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Space and Infrastructure			
Has the space refurbishment done for ART Centre	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Medical Examination Rooms – 2 Nos.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Counseling cabins – 2 Nos.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Patient waiting area	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Medical records, drug & supplies room	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Blood and specimen collection room	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Furniture & equipments for ART centre	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Computer and printer	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Phone & internet	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
CMIS/SIMS linkage	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Space and Infrastructure			
Nodal Officer in-charge ART centre in place and trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Ten member ART team for referrals trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Trained laboratory personnel (microbiologists & bio-chemists) available in the health care facility	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ART SMO recruited and trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ART counselor recruited and trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Data manger recruited and trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Staff Nurse keeper recruited and trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ART Pharmacist recruited and trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Lab Technician Recruited and trained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Care Coordinator recruited	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Availability of Drugs			
Adequate stock of first line drugs available	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Adequate drugs for opportunistic infections available	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Partnerships			
PLHIV networks contacted and involved	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
NGOs contacted and involved	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Private providers contacted and involved	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Other support groups contacted and involved	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Documents Available			
NACO registers, monthly report and cohort report format available	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
National ART Operational guidelines	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
National ART guidelines	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
National guidelines on OIs, paediatric, EID etc	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Laboratory Services Available			
Microbiology Lab with adequate space and technical expertise to perform the following tests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
HIV testing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Enumeration of CD4 cells	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Biochemistry lab with adequate space and technical expertise to perform the following tests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
CBC and other routines biochemistry investigations (LFT, RFT, Blood sugar, Lipid profile, S. Lactate, S. Lipase, Pregnancy test, X-Ray, Urine routine, USG, pap Smear)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Have the discrepancies identified during Appraisal visit rectified.....

Overall Preparedness : **Recommended for starting ARV service delivery**
 : **Not Recommended**

Issues	Suggested Follow up Action

Annexure 5

OM for Laboratory investigations

T-11020/36/2005-NACO (ART)
Department of AIDS Control
Government of India
National AIDS Control Organisation
(Care, Support & Treatment Division)

6th Floor, Chanderlok Building
36th Janpath, New Delhi-110001
Date- January, 2012

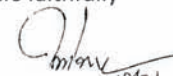
OFFICE MEMORANDUM

Subject: Revised Technical Guidelines on Laboratory Monitoring for patients at ART centres/LAC/LAC plus centers

1. **Essential / mandatory tests for all patients registering in HIV care at ART centre/LAC plus**
 - Haemogram/CBC, Urine for routine and microscopic examination, fasting blood sugar, blood urea, ALT (SGPT), VDRL, CD4 count, X-ray Chest PA view. Pregnancy test if required.
 - Symptoms and signs directed investigations for ruling out OIs.
 - **Additional tests for all patients to be started on ART**
 - Other investigation like USG abdomen, sputum for AFB, CSF analysis etc. as per the physician's decision depending on clinical presentation. Efforts to be made to fast track these investigations so that ART initiation is not delayed.
 - Serum creatinine is essential when considering TDF.
 - PAP smear, fundus examination also to be done but ART initiation not to be delayed for these tests.
 - **Tests for Special Situation**
 - HBsAg - for all patients if facility is available but mandatorily for those with history of IDU, multiple blood & blood products transfusion, ALT > 2 times of ULN, on strong clinical suspicion. But ART not to be withheld if HBsAg testing is not available.
 - Anti - HCV antibody only for those with history of IDU, multiple blood & blood products transfusion, ALT > 2 times of ULN, on strong clinical suspicion.
 - For patients with Hepatitis B or C co-infection, further tests may be required to assess for chronic active hepatitis
 - For patients to be switched to a PI based regimen, Blood Sugar, LFT and Lipid profile to be done at baseline.
2. **Tests for monitoring purpose**
 - Essential - CD4, Hb, TLC, DLC, ALT(SGPT), Creatinine/ creatinine clearance (if on TDF), every 6 months or earlier if required. For patients started on AZT based regimen, Hb at 15 days, then every month for initial 3 months, 6 months and then every 6 months/ as & when indicated. For patients started on NVP based regimen, ALT (SGPT) at 15 days, 1 month and then every 6 months. For patients started on EFV based regimen, ALT (SGPT) at 15 days, 1 month and then every 6 months. For patients started on ATV based regimen, lipid profile should also done yearly. For patients started on ATV, LFT to be done at 15 days, 1 month, 3 month, 6 months and then every 6 months. Blood sugar and Lipid profile every 6 months for patients on PI based regimen. All the above tests can be done earlier based on clinicians assessment/discretion.
 - Other investigations during follow up as per requirement/availability.

All above investigations other than CD4 and viral load estimations (when required), shall be done from the health facility where the centre is located with support from State Health Department.

Yours faithfully

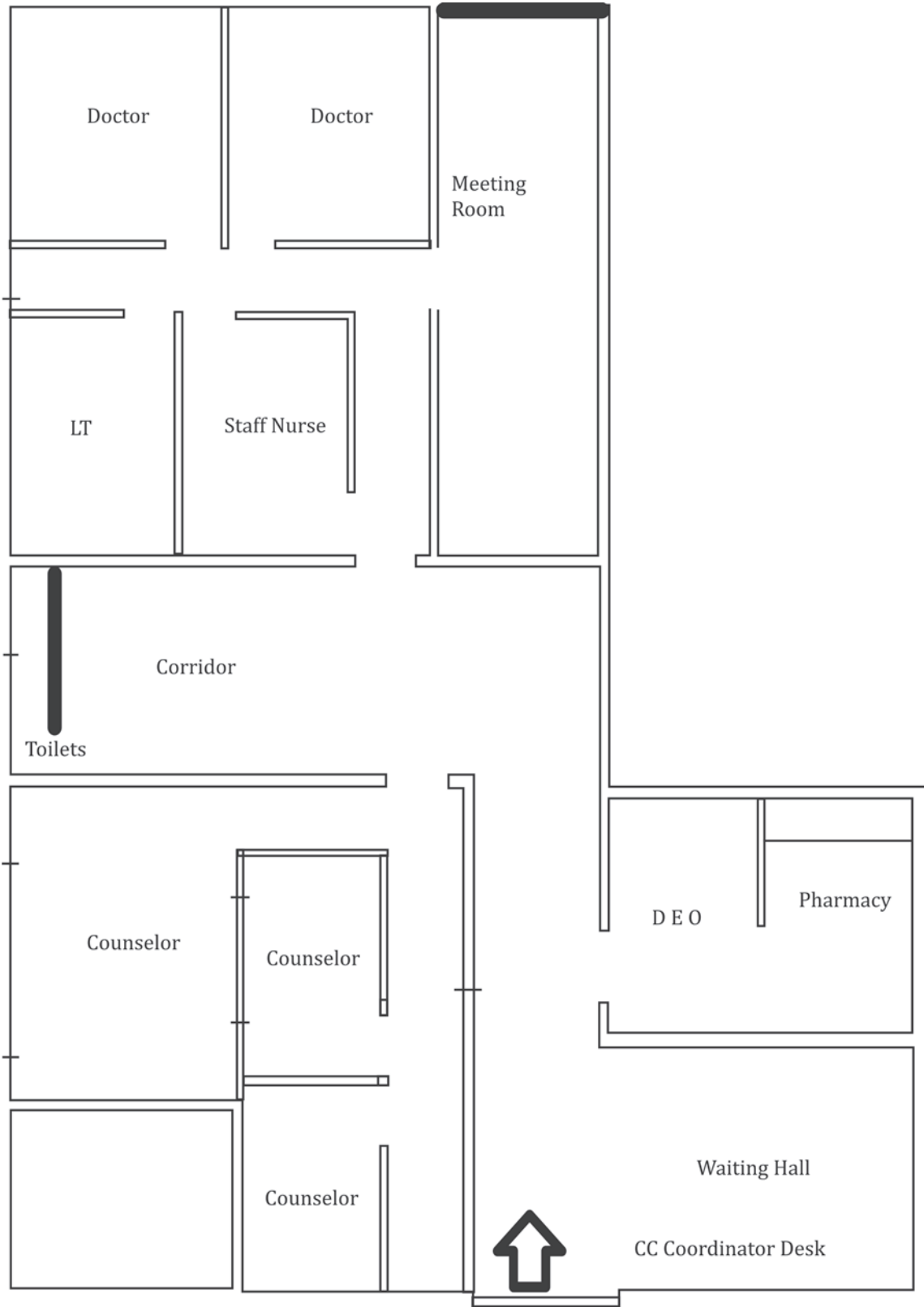


(Dr. Mohammad Shaukat
ADG (CST)

Copy to:

1. Project Director, All State AIDS Control Society
2. Nodal Officers of all ART centres
3. ADG(Lab Services), NACO

Annexure 6 ART Centre Floor Plan



Annexure 7

CONTRACTUAL SERVICE AGREEMENT

Ref: **Kindly insert the reference letter of Recontractual/Contractual agreement with date**

MEMORANDUM OF AGREEMENT MADE THIS _____ BETWEEN **MEDICAL SUPERINTENDENT**, _____, herein after referred to as **(Insert name of Dean/ Medical Superintendent)** and **(Insert the name of ART Staff)** hereinafter referred to as the signatory, whose address is:

_____.

WHERE AS ART Centre, _____ desires to engage the services of the Signatory on the terms and conditions hereinafter set forth; and

NOW THEREFORE, the parties here to agree as follow:

1. TERMS OF REFERENCE

The signatory will work as -----**(Insert Designation)** for ART Centre,----- . He will be based at office of ART Centre, --- ----- . He In will be under administrative control of Dean/ **Medical Superintendent** -----**(Insert the name of the Hospital)**

2. Responsibilities

Job responsibilities of (ART):

(As laid down in ART Operational Guidelines)

3. DURATION OF AGREEMENT:

This agreement will be deemed to have come into effect from the date of joining at ART Centre, _____. That is _____. The contract shall initially be for a period of one year from the date of commencement of the agreement, and shall be extended by consent of parties subject to satisfactory performance of duties.

4. REMUNERATION:

a. As full consideration for the services performed by the Signatory under the terms of the Agreement, **Medical Superintendent**, shall pay the Signatory a sum of Rs. -----/- (Rupees Eight thousands only) consolidated per month.

b. The Signatory shall be accorded the following annual/accrued, sick and maternity leave provisions as applicable to the civil servants associated with the project/activity.

Annual Leave / Accrued leave : 30 days per annum (2 ½ days per month)

Sick leave : 10 days per annum

Working hours and holidays shall be those applying to the project/activity to which the Signatory is assigned.

5. STATUS OF THE SIGNATORY:

The signatory shall have the status of the contractual employee and shall not be considered in any respect as a regular staff of **Area Hospital/District Hospital/Govt. General Hospital/Medical College Hospital**.

6. RIGHTS AND OBLIGATIONS OF THE SIGNATORY:

After the execution of this agreement or upon the selection of the signatory by Dean **Medical Superintendent**, the -----SACS will give instructions / training to the signatory for carrying out the aims of the SACS effectively. The instructions/timing shall not be divulged by the signatory to third parties or to other agencies. The rights and obligations of the signatory are strictly limited to the terms and conditions of this Agreement. Accordingly, the Signatory shall not be entitled to any benefit, payment, subsidy, compensation or pension from the -----SACS, except as expressly provided in this Agreement.

THE SIGNATORY SHALL NOT BE EXEMPTED FROM TAXATION AS PER INCOME TAX LAWS OF GOVERNMENT OF INDIA AND SHALL NOT BE ENTITLED TO REIMBURSEMENT OF ANY TAXES, WHICH MAY BE LEVIED ON THE REMUNERATIONS RECEIVED.

7. RESCISSION:

Either party may rescind this Agreement at any time by giving the other party at least one month notice in writing of its intention to do so.

8. TERMINATION:

In Case of improper conduct/ Poor work performance by the Signatory, the contractual employee will be terminated without assigning any reason therefore.

9. TITLE RIGHTS:

The title rights, copyrights and all other rights of whatsoever nature in any material produced in the framework of this Agreement shall be vested exclusively in **Medical Superintendent**, _____

10. UNPUBLISHED INFORMATION:

The Signatory shall exercise the utmost discretion in regard to all matters of official business. He shall not communicate to any person any information known to him/her by reason of his/her official position which has not been made public, except on written authorization of the **Medical Superintendent**, _____ AT no time shall he/she in any way use to private advantage information known to him/her by reason of his/her official position. These obligations do not cease with expiry of this Agreement.

11. DISCLOSURE:

The Signatory shall disclose to ART Centre,-----, any business or professional employment or activity in which he may be engaged prior to or at any time in the course of the present Agreement. These activities shall not be incompatible with the performance of the present services. The Signatory shall apply for outside assignment only through ART Centre, -----.

12. PERFORMANACE OF DUTIES AND STANDARDS OF CONDUCT:

In the performance of his/her duties under this Agreement, the signatory shall be exclusively responsible to **Medical Superintendent**, _____ and shall neither seek nor accept instructions from any Authority/external agency. The Signatory shall not engage in any activity that is incompatible with the purposes/principles or the proper discharge of his/her duties for ART Centre, ----- . He/She shall avoid any interaction with the press and in particular any kind of public pronouncement, which may adversely reflect on his/her integrity, independence and impartiality, which are required in his/her relationship with **Medical Superintendent**, _____ Any favour, gift or remuneration from any source other than -----SACS shall not be accepted by him/her unless th SACS approval has been obtained before hand.

13. SETTLEMENT OF DISPUTES:

Any claim or dispute relating to the interpretation of the execution of the present Agreement, which cannot be settled amicably or through conciliation procedures shall be settled by arbitration, unless the parties agree on another mode of settlement. The arbitration panel shall be composed of **Hospital Steering Committee as per NACO Guidelines**. The parties shall accept the arbitration award as final.

Signature
**Medical Superintendent,
Concerned Hospital**

Signature of the Contractual Employee

Name:

Date:

Annexure 8

NACO PERFORMANCE MANAGEMENT AND DEVELOPMENT SYSTEM (PMDS) FOR ART CENTRE STAFF

Name of the ART centre:

Name of the staff:

Designation:

Date of joining:

Performance period:

A. Performance Review

I. Common for all staff

S. No	Parameters	A.1 Self Review					A.2 Supervisor's Assessment				
		1	2	3	4	5	1	2	3	4	5
I. For all staff members											
1	Punctuality to work										
2	Attendance										
3	Team player										
4	Drive in achieving goals and objectives										
6	Interpersonal/communication skills										
7	Cross department works/collaboration										
8	Overall knowledge (appropriate to the function)										
9	Overall clinical care skills (appropriate to the function)										
Total (I)											

	Calculation of Total Score	Self Review	Supervisor's Assessment
1	Average score of total (I) i.e. sum total (I) divided by 9		
2	Average score of total (II) i.e. sum total (II) divided by number of parameters (in brackets)		
	Average score point (1 + 2) rounded off to nearest one number		

(Discuss with staff member, if there is major discrepancy between the scores)

B. Key to performance grading

1. Poor 2. Needs improvement 3. Satisfactory 4. Good 5. Excellent

All the staff should get at least a score of in both the sections separately to be entitled for annual increment. Overall score of three is the desired minimum performance level.

C. PMDS Supervisors

1. SMO/MO	-	1st Level: Nodal Officer	2nd Level: HoD, Medicine
2. Paramedical/Other Staff	-	1st Level: SMO/MO	2nd Level: Nodal Officer

D. Remarks of performance review and recommendations, if any

D1. Remarks (if any) by team members at the end of the review period

D2. Remarks (if any) by supervisor at the end of the review period

E. Overall evaluation of team member's performance by first level supervisor

(to be completed by supervisor)

1. Overall assessment: may include attitude to work, competencies such as creativity and innovation, flexibility, problem solving abilities, team work, persistence towards achieving goals, interpersonal skills, communication skills, working relationship, facilitative roles in cross departmental and NGO/network coordination/collaboration, etc.

2. The overall performance of the team member (tick box)

4) Exceeds expectations

3) Meets all expectations

2) Meets most expectations

1) Falls below expectations

3. Recommendation for contract renewal / salary increment for team member as per NACO guidelines

In view of the performance evaluation I have made above, I recommend

Granting of contract renewal / salary increment

Extension for three months for reasons stated below and a final review one month before the end of this period / withholding of the grade increment for three months for the reasons stated below and a final review one month before the end of the withholding period

Date:

Supervisor's Name:

Signature:

F. Second-level supervisor evaluation (HoD, Dept. of Medicine)

- I approve the recommendation of the first-level supervisor in Section E
- I disagree with the recommendation of the first-level supervisor in Section E

Comments/decisions: (additional pages may be attached)

Date:

Supervisor's Name:

Signature:

G. Staff member's comments (Only if assessment is below Grade - 3) (To be returned to first level supervisor within one week)

I have seen this performance evaluation (Tick appropriate box)

- I have no comments to add
- I have the following comments to add (additional pages may be attached)

Date:

Name of staff:

Signature:

Annexure 9

List of Items that can be procured under Universal Work Precautions

- 1) Disposable latex Gloves- 2 Boxes (100 per Box)
- 2) Disposable Laboratory gowns- As per Number of positive deliveries in years.
- 3) Disposable Plastic aprons- 24 Number
- 4) Disposable Face Mask- 2Boxes (100 per Box)
- 5) Disposable Caps- 4 Boxes (25 per box)
- 6) Shoe covers- 2 Boxes (25 pairs per box)
- 7) Rubber boots- 2 pairs
- 8) Hand rubs/ disinfectant solution for hand wash- 6 bottles.
- 9) Needle destroyer- 1 Number
- 10) Sharp disposal containers- 2 Numbers
- 11) 1% Sodium hypochlorite- 24 cans per year(5 liters canister of 4-5%)
- 12) 10% Sodium hypochlorite- 1can per year (5 liters canister of 40% solution)
- 13) Spirit/70% alcohol- 6 bottles (500ml/ bottle)
- 14) Cotton- 6 Bundles (large 500gm / pack)
- 15) Tissue paper rolls- 24 Numbers
- 16) Cloth Aprons/Laboratory coats- 4 Numbers
- 17) Colour coded waste disposal bags- 4 Dozen
- 18) Colour coded waste disposal bins- 8 Numbers
- 19) Biohazard labels- 2 Dozen
- 20) Bandaids – 100 Numbers
- 21) Needles/Syringes- 3 Boxes (100 per box)
- 22) Rubber gloves for dirty washing and waste handling- 8 Numbers.
- 23) Measuring cylinder glass 1 litre – 2 Number
- 24) Covered discard jars/discard buckets with lid- 4 Number
- 25) Hepatitis B vaccination and antibody titres for staff employed under NACO- 4 vials of 6 dozes each.
- 26) Any other item with prior approval of NACO

Annexure 10 Referral Form

Date of referral: __/__/__

Reg. No.: _____

Referring Unit:

Referred to:

Reasons for referral:

Name of the Patient:

Age/ Gender:

Signature & Name of the referring doctor

Feedback

Department and Unit:

Recommendations:

Signature & Name of the doctor

Annexure 11

ICTC- ART Centre Referral Form

State AIDS Control Society				State AIDS Control Society				State AIDS Control Society			
Referral Form				Referral Form				Referral Form			
Name & Address of ICTC:_____				Name & Address of ICTC:_____				Name & Address of ICTC:_____			
Copy-1 (to be retained at the ICTC)				Copy-2 (to be carried by the client to the ART centre and retained at ART centre)				Copy-3 (to be sent to ART centre through e-mail or post)			
Part-1 to be filled by the ICTC Counselor/Staff Nurse				Part-1 to be filled by the ICTC Counselor/Staff Nurse				Part-1 to be filled by the ICTC Counselor/Staff Nurse			
PID No.		Date of referral		PID No.		Date of referral		PID No.		Date of referral	
Name of the client(optional):				Name of the client(optional):				Name of the client(optional):			
Age: _____		Sex: _____		Age: _____		Sex: _____		Age: _____		Sex: _____	
Ph. No.:				Ph. No.:				Ph. No.:			
Category of the client (Tick Mark): ANC/General/Exposed infant				Category of the client (Tick Mark): ANC/General/Exposed infant				Category of the client (Tick Mark): ANC/General/Exposed infant			
Name and address of the ART centre referred to				Name and address of the ART centre referred to				Name and address of the ART centre referred to			
Counselor's signature:				Counselor's signature:				Counselor's signature:			
Part-2 to be filled by the ICTC staff after feedback from ART centre				Part-2 to be filled by the ART centre staff				Part-2 to be filled by the ART centre staff @			
Has the patient reached ART centre: Yes/No				Has the patient reached ART centre: Yes/No				Has the patient reached ART centre: Yes/No			
If Yes				If Yes				If Yes			
Pre ART Regn No.	Base-line CD4 Count	ART/ ARV prophylaxis Initiated (Yes/No)		Pre ART Regn No.	Base-line CD4 Count	ART/ ARV prophylaxis Initiated (Yes/No)		Pre ART Regn No.	Base-line CD4 Count	ART/ ARV prophylaxis Initiated (Yes/No)	
If ART not initiated reason				If ART not initiated reason				If ART not initiated reason			
ART Counselor Name & Signature				ART Counselor Name & Signature				ART Counselor Name & Signature			
				To be filled for all patients detected positive at ICTC and sent to ART centre/ LAC plus.							
				@ Copy 3 to be sent back to the referring ICTC by ART centre/ LAC plus through email / post / patient							

Annexure 12

CF- Consent form for patients registering into HIV Care & starting ART

I, (name)....., (address) CONSENT to share all information pertaining to my health and HIV/AIDS status with the service providers who will be part of the management of my condition.

And

I AGREE to receive antiretroviral therapy provided under the National programme.

I fully understand the information that has been provided by the health care staff in the following:

- ◆ That the ART is not an emergency and thus will be started as per the decision of the doctor. I shall attend the ART centre as per appointment for timely initiation of ART and regular follow up
- ◆ That receiving ART involves shared confidentiality with other service providers such as CBO/ NGO/CCC/positive network who may support my treatment and other welfare measures through outreach and home-based care activities at home.
- ◆ That ART requires 100% adherence to drugs and I shall abide by the same.
- ◆ That I understand the side effects of ART.
- ◆ That I shall not stop the drugs on my own and will return to the centre if there is any problem. In case I stop the drugs on my own accord/do not adhere to the regimen, I shall not hold the health care staff of the ART Centre responsible for any complication arising out of the same.
- ◆ In case, I am on ART from outside on a different regimen, I agree to receive the drugs/regimen provided under the national programme
- ◆ In case, I want to take ART from other centre or to go other city for livelihood or other reasons, I will inform my ART Centre and get a "transfer out" letter before leaving.

.....

Signature of witness

(Doctor/nurse/counselor)

.....

Signature of patient with date

(This should be translated in local language &/or explained to patient before taking patients signature)

Instructions: More rows to be added upto 20 /page	
1	Only those patients to be entered who have been diagnosed with an OI (newly diagnosed cases), follow up visits for treatment regarding same OI are not be entered. If any OI diagnosed else where (eg at RNTCP) should also be recorded here
2	One patient can be diagnosed with more than one OI at a given time
3	Put a tick against , particular OI diagnosed
4	If a patient is in HIV Care write HIV care(Pre- ART) reg. no. This will help to compile the no. of OI episodes separately for Pre- ART and On- ART patients
5	A printed copy of this format to be given to all the MO's and SMO in the morning by the data manager and data from these sheets to be compiled on daily basis.
6	This should be done on a daily basis, which will help to put OI episodes in the Monthly ART centre reporting format at the end of the month
	Instructions for capturing OI data from LAC/LAC plus
1	Data from LAC about OI's is to taken form Col No. 11 of format 4b and Col No. 10 of format 4c which then has to be entered in the monthly summary report, which is then entered in section 7 of the Monthly ART centre report

Annexure 15

Transfer out form (Form for transfer of PLHIV to other ART Centre)

Name and address of the transferring ART Centre _____

Name and address of ART Centre where patient is being transferred _____

Name of Patient: _____

HIV Care (Pre-ART) registration no. _____

Address and contact details: _____

Reason for transfer (Specify) 1. Patient Choice 2. Provision of second line ART/ Alt First line

Date of transfer: _____ .

ART regimen (pls. specify):

Date of starting ART: ____/____/____ (Date/Month/Year); Latest CD4 _____

Next date for dispensing drug is ____/____/____

Please find the following original documents handed over to the patient:

1. Patient Treatment Record (white card)
2. Patient Booklet (Green Booklet)
3. Others, if any (mention)

Name and Signature of SMO/MO

Phone no. and e-mail of SMO/MO:

(To be filled by the receiving ART Centre and sent to the transferring ART Centre by post/email)

.....(Name of Patient), referred by you on date.../...../... has reported and been registered with us on..../...../..... along with the documents sent by you. His HIV Care (Pre- ART) registration no. is..... and ART registration no. (if applicable) is.....

Name and Signature of SMO/MO

Phone no with e-mail of SMO/MO

Address of the ART Centre, transferring out the patient:-

Annexure 16

RRF: Request form to SACEP at COE /pCoE/ART plus Centre for Review

Dear Dr Referral date

Centre of Excellence /ART plus Centre

I would like to refer this patient for review by the SACEP for Toxicity to first-line ARV drugs
 Suspect Treatment Failure
 Others (specify)

Name Age Sex

Name of the Care giver

Address & Phone no.

ART centre name & phone no.

Contact person at ART centre & mobile no.

Name & Contact no. of Linked NGO/CCC /DLN:

The following are attached with this request form:

- ◆ Photocopy of the Patient treatment record (White Card)
- ◆ Photocopy of all lab tests including CD4
- ◆ Photocopy of all other relevant material
- ◆ Photo documentation of toxicity (If available)
- ◆ Address proof with photo

The following sections summarises the patient antiretroviral therapy history:

A: Summary of the case history of the patient (pre-ART; ART; suspected treatment failure/suspected ARV toxicity)

B. Summary of adherence history and other psycho-social issues

C. Summary of relevant laboratory tests including CD4 (of last 1 month) /viral load (if available)

Name and Signature of Nodal Officer of referring

ART centre with contact number & email

Reply from SACEP at CoE/pCoE/ART plus Centre to Referring ART centre (After review)

Dear Dr Date.....

ART centre

Patient name Gender/Age.....

Address SACEP Reg no:.....

Referred for on Date

Findings/ investigation results:

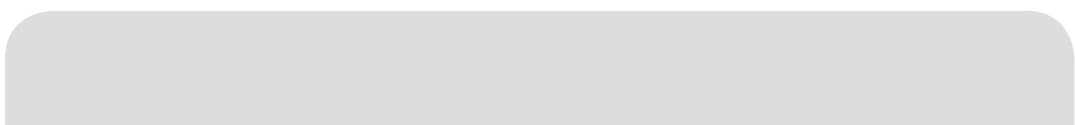
.....

Treatment/follow-up Plan:

.....

Name and Signature of Nodal Officer

COE/ ART plus with contact number & email



Annexure 17

(Form for referral of PLHIV from Nodal ART Centre to Link ART Centre/ LAC plus)- Link Out Form

Date of link out:

Name & address of NODAL ART CENTRE _____

Name & address of LAC/LAC plus, _____

Name of Patient:

Pre-ART No. (for Pre-ART patients):

ART No. (for patients on ART: _____

Address

Phone No.

Date of starting ART: (Date/Month/Year);

Initial Clinical Stage – _____ & WHO Stage - _____ on date _____ CD4 count _____ on date _____

Current Clinical Stage – _____ & WHO Stage - _____ on date _____ CD4 count _____ on date _____

Last date of dispensing ARV _____

Next date of dispensing drug _____ & Expected pill balance on that date: _____

Current Regimen - _____,

Reason for Link out: Pre-ART Care/ ART monitoring & refill

Remarks _____

Date/month for CD4 count, when the patient is to be referred back to Nodal ART Centre-

Please find the following documents handed to the patient:

Photocopy of Patient Treatment Record (White Card)

Patient Booklet(Green Booklet)

Others, if any (mention _____

Name and Signature of SMO/MO _____

Phone no. _____ and E mail _____ of SMO/MO:

Nodal ART Centre

To be filled by the receiving and sent back to the Nodal ART Centre by post / email

..... (Name of Patient) with ART No._____, transferred by you on

Date / / has reported and been registered with us on / / The documents Sent by you have been received.

Name and Signature of MO

LAC/LAC plus

Phone no. with E mail of MO

LAC/LAC plus

Annexure 18

ART Centre Supervisory visit Report Format

This checklist is to be used by the designated supervisory team in conjunction with the ART centre staff during their visit to an ART centre. The aim is to see the quality of services offered their conformity to national guidelines, to identify problems and take corrective actions.

This form is used to document the assessment of an ART Centre conducted after operationalisation of the centre. The form includes information on organization and infrastructure of the ART Centre, the number of personnel employed, drug stocks and availability, partnerships for ART service delivery, conformity to national guidelines and quality of services. The form also lists any problem areas that need to be corrected by the ART Centre before providing treatment services.

3.1 How will it be used?

This format has four sections

- I. Checklist for supervisory visit
- II. Recording and Reporting System
- III. Assessment of Patient Satisfaction
- IV. Summary of Supervisory Visit

3.2 When to complete the ART Centre Supervisory visit format?

This form is completed during every supervisory visit to the ART Centre.

3.3 How to complete the ART Centre Supervisory visit format?

In this section you will learn how to complete the ART Centre Supervisory visit format

Section I - Checklist for supervisory visit: Write the name of the Hospital and the name of the ART nodal officer at the top of the form.

During the assessment visit, tick (✓) against Yes or No confirming for readiness of each of the indicators being assessed. Write down details of any problems identified during the assessment in the appropriate column against each indicator.

Section II - Recording And Reporting System

The section is self explanatory and assessment needs to be conducted accordingly

Section III -Assessment of Patient Satisfaction

This question form is undertaken to evaluate the quality of services provided at the ART Centre. The comments would help us to improve the quality of care and support we provide. Patients may be asked to read and respond to each statement carefully and be frank about their opinion. The patients need to be assured that the information provided by them will be kept confidential. Do not mention the name of patient on this form and fill it up in private.

Section IV - Summary of Supervisory Visit

No supervisory visit is complete without a summary of your observations, interviews with the staff, and discussing and solving any problems you have found. For the ART programme, there is a form for summarizing your findings and recommendations called the Summary Recommendations of Supervisory Visit (see below). This report should be prepared after consultation with HoD of Medicine.

Implement your solutions immediately, whenever possible. For example, immediately provide supervised practice of a task incorrectly performed.

Before you leave the centre, explain to the nodal officer any problems you found and solutions you implemented. If you need help in solving a problem, discuss it with the officers / authority concerned.

For completing the Summary Recommendations form you first need to list and describe the problem precisely under the heads A through G in the first column (A. Commitment, B. Organization of services, C. Uptake, D. Treatment and Follow-up, E. Drugs and Logistics, F. Record Maintenance, G. Others).

For describing the problem, try to answer the following questions:

- ◆ Where does the problem occur?
- ◆ With whom does the problem occur?
- ◆ When and how often does the problem occur?
- ◆ When did the problem start occurring?

To identify the cause try to answer the following questions:

- ◆ Does the person know that he is responsible for doing the task? Has he been told?
- ◆ Does the person have the skill or knowledge to do the task?
- ◆ Does the person want to do the task?
- ◆ Are there obstacles preventing the person from doing the task?

In the next column under recommendations, provide answers to the problems.

To identify and implement solutions try to answer the following questions. The specific solution depends upon the cause(s) of the problem. Solutions you select should:

- ◆ remove (or reduce) the specific cause(s)
- ◆ be reasonable (affordable and realistic)
- ◆ not create other problems

In the last column write the name or designation of the person who will be responsible for implementing the recommendations at the ART centre. Remember to leave a copy/ or send a copy of the recommendations with the nodal officer.

The form should be signed off by the appraisal team leader/ Regional coordinator.

(This checklist is to be used by the designated supervisory team in conjunction with the ARV treatment unit staff during their visit to an ART centre. The aim is to see the quality of services offered their conformity to national guidelines, to identify problems and take corrective actions.)

Name of ART Rx Unit: _____

Date of visit _____

Name of Supervisor: _____

Name of ART Unit In charge: _____

I Institutional commitment & functioning of ART Centre			Remarks
1. Is there high commitment to the national ART programme: (this will be indicated by involvement of the institution in the ART services)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
2. Is proper space and infrastructure available at ART Centre	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
3. Are there proper signages with in hospital for the ART centre	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
4. Is internet, computer with printer , TV, phone and drinking water facility available at ART Centre?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
5. Is the ART unit staffed as per the NACO guidelines?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
6. (SMO, MO, Lab Technician, Counselor, Pharmacist, DEO, Nurse, Care Coordinator).	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
7. Is the IEC material, List of neighbouring ART Centres & LinK ART Centres displayed in ART Centre	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
8. Are the ART services well organized: will be indicated by the flow of movement of the patient to access services as required (clinical, lab, drugs, counseling).	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
9. Is the SOP for the functioning of the ART centre is being followed as per operational guidelines?(specifies roles and responsibilities, patient flow, etc)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
10. Has sensitization of all the hospital staff been carried out?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
11. Is there adequate co-ordination of the ART unit with other departments of the hospital to maximize uptake of patients?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
12. Does the ART centre has linkages with other department for out referral and indoor admissions	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
13. Is the ART Centre well integrated with Dept of Medicine (OP services, IP services, posting of faculty and PG students)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
14. Is the ART Centre and department of pediatrics working closely for managing CLHAs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
15. Does the Nodal Officer play an active role in functioning of ART Centre	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

II Recording & Reporting			Remarks
16. Are the NACO specified patient and programme monitoring records being maintained	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
i. Pre ART register (HIV care)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ii. ART Enrollment register	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
iii. Drug Stock register	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
iv. Drug Dispensing register	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
v. Patient Treatment record (white card for Pre-ART & on ART patient)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
vi. Green Book (for Pre-ART & on ART)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
17. Is confidentiality of records maintained?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
18. Are the records properly stored ?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
19. Are the patient treatment records up to date?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
20. Are all entries of patients computerized in PLHIV software & sent to NACO server	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
21. Is attendance register of ART staff is maintained properly	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Pre-ART & ART services			Remarks
22. Is CD4 testing been done every 6 months for all registered patients (Pre and On ART)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
23. Is Pre-ART CD4 due list being maintained and followed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
24. Are the eligibility criteria for initiating ARVs being followed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
25. Are the national guidelines for ART being followed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
26. Are all patients eligible for ART initiated on ART	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
27. Is there any waiting period for people eligible for ART and <i>not receiving it? (If yes, describe why/ see patient records, CD4 count etc.)</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
28. Is there a mechanism in place to track back patients with borderline CD4 results	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
29. Is adherence issue being given due importance (adherence counseling, pill count)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
30. Is the daily due list of patients maintained and followed up?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
31. Is CPT given to all patients initiated on ART as per guidelines (CPT and ART initiation cut off points are different)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

III Drug stocks			Remarks
32. The drug stock register and dispensing register (adult, paediatric & OI) up to date?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
33. Are adequate drugs available for the next 3 months (stock position)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
34. Are the drugs stored as per the specifications?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
35. Is the "First Expiry First Out" principle followed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
36. Are there adequate measures in place to prevent pilferage?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
37. Has any physical verification of the available stock done in last three months? (and by whom)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
38. Does the regimen wise consumption of drugs matches with the no of patients on ART?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
39. Has the centre received the overall stock as per the annual allocated quantity (cross verify with the letter sent by NACO/ SACS on allocated quantity)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
IV Laboratory Services Availability			Remarks
40. Microbiology Lab with adequate space and technical expertise	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
i. HIV testing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ii. Laboratory diagnosis of OIs, STIs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
iii. Enumeration of CD4 cells	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
41. Biochemistry and hematology labs with adequate space and technical expertise	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
i. CBC and other routines biochemistry investigations	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
ii. LFT	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
iii. Blood sugar	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
iv. Lipid profile	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
v. S. Creatinine	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
vi. S. Lactate	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
42. Are baseline tests being done for all the patients?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
43. Any of the above testing is charged	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
CD4 Testing			
44. Is CD4 testing done daily	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
45. What are the timings for blood collection for CD4 testing	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
46. Is single prick Blood collection done for all testing (including CD4 testing) in the ART Centre itself ?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
47. Is there a waiting period for the people to get tested? How long? How many?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

48. Has there been break in supply of CD4 test kits, or vacutainers in last 3 months?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
49. Is there are AMC for CD4 machine?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
50. Number of days machine not in use during last 6 months.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
V Referral & Linkages			Remarks
51. Are there referrals from the ICTC to the ART Centre? (Write the number in last 3 month). Compare with total positives detected at ICTC in same period.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
52. Does ART Centre refer the spouse or others suspects to ICTC?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
53. HIV / TB linkages is maintained?) (check linelist register & monthly report)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
54. Is there effective cross referral amongst ART Centre and CCC?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
55. Coordination with community care centre is in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
56. Is a proper MIS/ LFU tracking mechanism in place	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
57. How many LFU have been tracked back by CCC/DLN during last three months out of the list shared	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Link ART Centre			
58. How many Link ART centres are linked to the ART	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
59. Linkages and communication with LACs is maintained?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
60. Regular reporting system from LACs in place? (See for LAC monthly reports)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
61. Does the ART Centre has any mentoring of LACs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Linkages with CoE			
62. Is the ART Centre oriented in SACEP referral mechanism	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
63. Are any patients on Second line/Alternate First line referred back to ART centre for continuation of treatment (If any problems, pl mention)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Other Information			Remarks
64. Are the PEP drugs available in casualty , ICU & labour room	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
65. Are the consumables for Universal Work precautions available	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
66. Is the ART staff vaccinated for Hepatitis B	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
67. Measures for airborne infection control is in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
68. Are meetings with nodal officer, faculty and staff regularly held?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Financial Management			
69. Does the centre has dedicated bank account. Who are signatories	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

70. Does the ART staff get remuneration on time?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
71. Are the funds for UWP available	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
72. Is the asset register available at the ART centre	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
73. Rs. 5000 imprest money maintained by Data Manager?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

II. Functioning Of The Recording And Reporting System

This section will help supervisors assess the functioning of the recording and reporting system

- 1) Ask the ART centre in charge to show you the all NACO ART registers
 - i. Pre ART register (Column 1 to 22 filled by counselor under supervision of the Doctor)
 - ii. Patient Anti retroviral Treatment Card (White Card – A triple folded card for information and monitoring of Patient and to assess effectiveness of ART). Ask whether daily sorting out of white card is done or not?
 - iii. ART enrolment register- to be filled in by the counsellor under the supervision of the treating doctor.
 - iv. ART drug dispensing register (Maintained by Pharmacist or staff nurse and has information about daily drug consumption hence ensure accountability).
 - v. ART drug stock register (Maintained by Pharmacist or staff nurse and helps to alert stock outs).
- 2) Check whether ART due list is maintained properly or not? If maintained then ask how?
- 3) Check whether CD4 due list is maintained properly or not? If maintained then ask how?
- 4) Check that the all registers are completed and up to date (see date of last entry)
- 5) Check where the Patient Treatment Record is stored.
- 6) Check whether information regarding second line ART is maintained properly? If yes then ask how?
- 7) Take a random patient treatment record and check for last entry of patient follow-up visit.
- 8) Ask the ART in charge to show you where this patient's information is recorded in the ART Enrollment register.
- 9) Compare the patient information (CD4 count, Clinical stage, weight, functional status) in the patient treatment record with the ART enrollment register.
- 10) Compare other variables such as adherence, etc.
- 11) Repeat this exercise for a second or third patient.
- 12) Ask whether linkages with LACs are effectively maintained?
- 13) Ask whether LACs are reporting regularly to ART centre?
- 14) Ask about coordination of CCC with ART Centre
- 15) Ask the ART In charge to show you the last monthly ART centre report
- 16) Make sure that all sections in the monthly report format have been completed.
- 17) Compare the total number of patients ever started on ART with the number in the enrollment register.
- 18) Compare the cumulative number of patients Lost to Follow-up (LFU) in the monthly report and count the number of LFU in the ART enrollment register.

- 19) Compare the cumulative number of patients MISS in the monthly report and count the number of MISS in the ART enrollment register.
- 20) Take a look at the DOTS and ART treatment rate in the monthly report (section 9.7). Discuss treatment issues with the ART centre in charge.
- 21) Take a look at the treatment adherence rate in the monthly report (section 10). Discuss issues of adherence with the ART centre in charge and the counselors.
- 22) Take a look at the number of patients on other regimens (or second line) in the monthly report. Discuss with the ART centre in charge.
- 23) Check for Drug stock outs reported in the monthly report and the action taken (Section 12)
- 24) Check the involvement of NGOs. Discuss issues with the ART centre in charge.
- 25) Check whether signage for IEC material is in proper visible place with understandable format?

III. Assessment of Patient Satisfaction

This question form is undertaken to evaluate the quality of services provided at the ART Centre. Your honest comments would help us to improve the quality of care and support we provide. Kindly read each statement carefully and be frank about your opinion. The information provided by you will be kept confidential. Do not mention your name on this form and fill it up in private.

Name of the ART Centre:

For All Patients

- | | |
|--|-----------------|
| 1) I had difficulty in locating the ART centre in the hospital/institution. | Y / N |
| 2) There was place for me to sit while I was waiting. | Y / N |
| 3) I felt comfortable while talking to the staff. | Y / N |
| 4) ART Counselor was attentive and listened to my problem. | Y / N |
| 5) ART centre staff explained to me about AIDS treatment. | Y / N |
| a. AIDS has no cure. | Y / N |
| b. Treatment is life long. | Y / N |
| c. Treatment has side effects. | Y / N |
| d. Adherence to treatment is crucial. | Y / N |
| e. Practicing safe sex while on treatment is important. | Y / N |
| 6) I felt that other health concerns were taken care off. | Y / N |
| 7) I felt comfortable asking questions to the ART centre staff. | Y / N |
| 8) I feel ART centre staff treated me with respect was supportive and helpful. | Y / N |
| 9) I felt that my personal information was kept confidential. | Y / N |
| 10) I understood everything that I was told. | Y / N |
| 11) I plan to visit the ART Centre again. | Y / N |
| 12) I intend to tell others about the ART Centre. | Y / N |
| 13) My overall experience in the ART Centre was- | good / ok / bad |

For Old patients:

- 14) I have missed 10% - 20% - 30% of my appointments Y / N
- 15) I have problems with side effects. Y / N
- 16) I brought my empty blister package in this visit. Y / N

Any other comments.

IV. Summary Recommendations of Supervisory Visit

Name of ART centre: _____ Date of Visit: _____

Name of Supervisor: _____

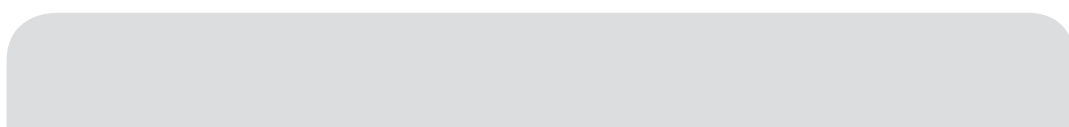
Name of ART centre In-charge: _____

Problem Identified	Recommendations	Responsible Person
A. Commitment		
B. Organization of services		
C. Uptake of services		
D. Treatment and Follow-up		
E. Technical knowledge of staff*		
F. Drugs and Logistics		
G. Record Maintenance		
H. Others		

**Discussion with the counselors should be done about the concept of pill count, checking adherence and with MO discussion should be done about EID, PPTCT services etc in order to assess their knowledge.*

Summary Recommendations of Supervisory Visit

Signature



Annexure 19

Quarterly ART Reporting Format for Private Sector

Name of District & State:	_____				
Reporting Month & Year:	_____				
Name of Reporting centre / Doctor:					
Complete Address:					
Email :					
Contact No (land line & Mobile):					
	Male	Female	Children	TG	Total
No. of PLHIV registered with you in HIV care					0
No. of PLHIV ever started on ART by you/ your centre					0
No. of PLHIV currently on ART with you/ your centre					0
No. of PLHIV initiated on "First Line ART (NNRTI) based regimen					0
No. of PLHIV switched to Second line ART (PI based) due to toxicity to NNRTI					0
No. of PLHIV switched to second line (PI based) due to treatment failure					0
No. of PLHIV started on an initial second line ART (PI Based)					0
No. of patients referred to Government ART centre					0
Guidance on Rational ART Regimen					
First Line ART regimen	2 NRTI (or 1 NtRTI + 1 NRTI) + 1 NNRTI				
Alternative first line ART	2 NRTI (or 1 NtRTI + 1 NRTI) + 1 PI (due to NN- RTI toxicity)				
Second line ART	2 NRTI (or 1 NtRTI + 1 NRTI) + 1 PI (due to treat- ment failure)				

Annexure 20

Centres of Excellence/ Paediatric Centres of Excellence

Adult Centres of Excellence	
1	Maulana Azad Medical College, Delhi
2	Sir Jamshetjee Jejeebhoy Medical College & Hospital, Mumbai
3	Byramjee Jeejabhoy Medical College & Hospital, Ahmedabad
4	Post Graduate Institute of Medical Sciences, Chandigarh
5	Gandhi Hospital, Hyderabad
6	Bowring & 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
Paediatric Centre of Excellence	
1	Indira Gandhi Institute of Child Health (IGICH), Bangalore, Karnataka
2	LTMG, Sion Hospital, Mumbai, Maharashtra
3	Jawahar Lal Nehru Hospital, Imphal, Assam
4	Kalawati Saran Hospital, New Delhi
5	Medical College, Kolkata, West Bengal
6	Niloufer Hospital, Hyderabad, Andhra Pradesh
7	Institute of Child Health, Chennai, Tamil Nadu
ART Plus Centres	
1	Govt. Medical College, Salem
2	Govt. Medical College, Aurangabad
3	Byramjee Jejeebhoy Medical College & Sasoon Hospital, Pune
4	Govt. Medical College, Surat
5	Govt. Medical College, Trichur, Kerala
6	Govt. Medical College, Nagpur
7	KIMS, Hubli, Karnataka
8	GGH, Vijayawada, Andhra Pradesh
9	RIMS, Cudappah, Andhra Pradesh
10	KGH, Visakhapatnam, Andhra Pradesh
11	VMS, Bellary, Karnataka
12	DH, Gulbarga, Karnataka
13	DH, Udupi, Karnataka

14	GMCH, Madurai, Tamilnadu
15	GMCH, Tirunelveli, Tamilnadu
16	GMCH, Bhopal, Madhya Pradesh
17	MCH, Guwahati, Assam
18	RMRIMS, Patna, Bihar
19	PVPG Hospital, Sangli, Maharashtra
20	SMS Hospital, Jaipur, Rajasthan
21	KGMU, Lucknow, Uttar Pradesh

Annexure 21

ART to SACS drug reporting format

ART centre name	
Reporting period	
Adult	Number of PLHIV alive and On-ART on this regimen
(Zidovudine + Lamivudine + Nevirapine)	
(Stavudine + Lamivudine + Nevirapine)	
(Zidovudine + Lamivudine + Efavirenz)	
(Stavudine + Lamivudine + Efavirenz)	
(Tenofovir+ Lamivudine + Nevirapine)	
(Tenofovir + Lamivudine + Efavirenz)	
(Zidovudine + Lamivudine + Atazanavir/Ritonavir)	
(Zidovudine + Lamivudine + Lopinavir/Ritonavir)	
(Stavudine + Lamivudine + Atazanavir/Ritonavir)	
(Stavudine + Lamivudine + Lopinavir/Ritonavir)	
(Tenofovir + Lamivudine+ Atazanavir/Ritonavir)	
(Tenofovir + Lamivudine+ Lopinavir/ Ritonavir)	
Others	
Total number of Adult PLHIV	
Pediatric	Number of PLHIV alive and On-ART on this regimen
P I (Zidovudine + Lamivudine+ Nevirapine)	
P I(a) (Stavudine + Lamivudine + Nevirapine)	
P II (Zidovudine + Lamivudine + Efavirenz)	
P II (a) (Stavudine + Lamivudine + Efavirenz)	
P III (Abacavir + Lamivudine + Nevirapine)	
P III (a) (Abacavir + Lamivudine + Efavirenz)	
P III (b) (Abacavir + Lamivudine + Lopinavir/ Ritonavir)	
P IV (Zidovudine + Lamivudine + Lopinavir/Ritnovir)	
P IV (a) (Stavudine + Lamivudine + Lopinavir/ Ritonavir)	
P V (Abacavir + Lamivudine + Didanosine + Lopinavir/ Ritonavir)	
Others	
Total number of Paediatric PLHIV	0
Total PLHIV	

A C K N O W L E D G E M E N T S

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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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